

Market share and market segment of public employment services

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**Market Share and Market Segment of
Public Employment Services***

Hugh Mosley and Stefan Speckesser

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Abstract

After an introductory discussion of "market share" and market failure in job matching, the results of two empirical analyses are reported. The first is a cross national comparison of the importance of the public employment service (PES) as a job search channel in 12 EU states based on a special tabulation from the Eurostat Community Labour Force Survey; the second is an in-depth study of the role of the PES in job finding in Germany based on data drawn from 10 waves of the German socio-economic panel, 1984-1993.

Briefly stated, the principal findings of the cross-national comparison are: 1) The PES does not primarily compete with private employment services (PRES), even in countries where they are permitted, because most job seekers use other formal and informal search channels (advertisements, direct applications to employers, friends and acquaintances etc.); 2) The clientele served by PRES is surprisingly heterogeneous and differs only in degree from that served by the PES, which suggests that PES and PRES are complementary not because they serve markedly different clienteles - as sometimes assumed - but because most PRES are temporary work agencies with similar clienteles.

Analysis of the German panel data suggests that the PES has a relatively low market share in all transitions to employment (ca. 12% in our sample), which is significantly lower than that reported in administrative data but consistent with the results of employer surveys. Moreover, logistic regressions of individual and job characteristics on PES placements indicate that the German PES not only has a relatively low market share but also that PES placement activity is only weakly targeted on groups and market segments on which it would have the greatest labour market impact.

Zusammenfassung

Mit der Liberalisierung der Arbeitsvermittlung und der Zulassung privater Arbeitsvermittlung in den meisten Ländern der Europäischen Union stellt sich die Frage nach der Rolle der öffentlichen Arbeitsvermittlung neu: Wie wichtig ist das Arbeitsamt heute noch im individuellen Suchprozeß auf Arbeitsmärkten für Arbeitslose und Beschäftigte? Gibt es Unterschiede zwischen den Kunden privater und öffentlicher Arbeitsvermittlung? Hilft das Arbeitsamt den Problemgruppen? Diese Fragen wurden im Forschungsprojekt "Aktivierung der Arbeitsvermittlung" auf Basis international vergleichbarer Daten von Eurostat untersucht. In einer vertiefenden Analyse auf Basis des sozioökonomischen Panels wurde zudem geschätzt, wie viele neue Arbeitsplätze direkt über die Vermittlung des Arbeitsamts zustande kommen und wie wichtig diese Arbeitsmarktinstitution für Zielgruppen ist.

Die Ergebnisse zeigen zunächst, daß private und öffentliche Arbeitsvermittlung weniger miteinander im Wettbewerb stehen als erwartet. In den EU Staaten

nutzen die Arbeitsuchenden meist mehrere Wege auf der Suche nach neuer Beschäftigung, so daß private Anbieter eine wichtige Ergänzung bilden. Zudem unterscheiden sich die Kunden privater kaum von denen der öffentlichen Arbeitsvermittlung: Die oft getroffene Annahme, daß private Arbeitsvermittlungen nur das Top-Segment abdecken, erweist sich als unzutreffend, wohl auch, weil die privaten Arbeitsvermittlungen oft als Zeitarbeitsfirmen auch gering qualifizierten Arbeitnehmern Chancen auf dem Arbeitsmarkt bieten.

Die Frage, ob die öffentliche Arbeitsvermittlung gezielt Problemgruppen vermittelt und damit insbesondere den schwer vermittelbaren Arbeitnehmern nützt, wurde exemplarisch für die Bundesrepublik mit Daten des sozio-ökonomischen Panels für die Jahre 1984- 93 untersucht. Hier zeigten logistische Regressionen daß bei einem relativ geringen Vermittlungsanteil an allen neu aufgenommenen Beschäftigungsverhältnissen (ca. 12%) kaum eine gruppenorientierung erkennbar ist, obwohl die Arbeitsmarkteffekte hier am größten wären. Lediglich im Bereich der Vermittlung von Ausbildungsverhältnissen nimmt die öffentliche Arbeitsvermittlung eine wichtige Funktion bei zielgruppenorientierter Arbeitsmarktpolitik ein, auch ist ihr Marktanteil hier doppelt so hoch.

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Introduction

Until recently public employment services (PES) were monopoly providers of placement services in most European countries. Private placement services (PRES), especially commercial agencies, were more or less strictly prohibited. This situation changed dramatically as most "monopoly" placement service regimes were liberalized. Among EU states only France, Greece, Italy, Luxembourg, and Spain retain a prohibition of commercial placement agencies. All these countries, with the exception of Italy and Spain, now allow temporary work agencies, which were the first wave of liberalization in the former PES monopoly countries.

There are two major issues with respect to these changes: First, the theoretical issue of the rationale for a PES and the optimal public-private mix. Like other former monopoly public agencies, public employment services are in the process of redefining their role in the new institutional setting. Second, the practical question of the impact of liberalization, especially competition from private agencies (PRES) on employment service regimes.

After an initial discussion of market failure and the rationale for a public employment service (2.), the balance of this study focuses on the empirical question of PES performance in terms of its market share and market segments served, and the impact of private competition on the PES. The following interrelated questions are discussed: What is "market share" in placement services and do we know about PES's market share EU countries? Is market share important? (3.)

What types of institutional, policy and labour market factors affect cross-national differences in PES market share? (4.1)

Do private employment services (PRES) displace public employment services (PES), lowering the PES market share? Does the PRES cream

the labour market, serving primarily the employed, the skilled rather than problem groups? (4.2)

Finally, in a detailed case study of job search in Germany, who actually finds employment through the PES? (5.)

The study draws in particular on three different types of data: (1) A survey of available cross-national administrative data on PES placements and share in all hirings and (2) a secondary analysis of data on use of the PES in individual job searches drawn from Eurostat's European Labour Force Survey; (3) analysis of an employment transitions data set drawn from 11 waves (1983-1994) of the German Socio-economic Panel.

1 The Public Employment Service and Market Failure

Labour markets are search markets in which jobseekers and vacancies are matched. Jobseekers and potential employers have to come into contact with each other and to reach agreement (offer-acceptance or contract). Due to heterogeneity on both sides of the labour market (qualifications, location, compensation, working time preferences, personal preferences etc.) search processes entail costs for jobseekers and for employers in time, money or both. Given these information problems, intermediaries in job matching (whether public or private) are in many cases an efficient alternative (Walwei 1996a).

It is useful to distinguish between formal and informal search channels. Formal search channels are, for example, the use of public or private employment services, and newspaper advertisements. Informal channels are direct application to employers, information supplied by friends, relatives, and colleagues, vacancy notices at work places etc. The use of labour market intermediaries, i.e. public and private employment services, represents a special type of formal search channel. In all countries - even those with a "monopoly" that prohibit private placement services - most placements take place through informal search channels and through adver-

tisements without any mediation by public or private agencies (Mosley 1997).

This fact has two major implications for the PES: 1) Search processes on the labour market are embedded in social processes and the potential for public intervention is limited; 2) an employment service that seriously attempted to monopolize job matching (100% market share) would merely displace societal processes of self-organization that are in most cases more efficient and more effective.

If employment services are in many cases efficient intermediaries on the labour market, is there a case for market failure that justifies public intervention? The PES is only one method of job search for individuals or for employers filling vacancies, and there is no reason to think that it is always the most efficient. On the other hand, the existence of public employment services in all OECD countries suggests that there is a problem of market failure in job matching that justifies public intervention.

A number of arguments can be made for the PES from the point of view of market failure: (1) Private agencies cannot provide the collective good of greater transparency on the labour market because information on job-seekers and vacancies is for them a proprietary asset in a competitive business environment; (2) due to their expense, private agencies will serve only a small and selective segment of the labour market, resulting in a suboptimal use of mediation services by employers and the few job-seekers who can afford them;¹ (3) private agencies serve primarily the interest of employers and not the unemployed; (4) there may be economies of scale in the provision of placement services; (5) weak and inexperienced participants in the labour market may be exploited by private services; (6) there are external effects to unemployment insofar as the unemployed are eligible for unemployment benefit which make it neces-

sary to control availability for work and search intensity (Buttler and Walwei 1995; Schmidtke-Glamann 1995).

Private intermediaries existed prior to the development of public placement services, and the establishment of the PES thus cast some light on the historical rationale for this form of intervention in the labour market. There were three principal types of advocacy of public placement services from the mid-19th to the establishment of the first national placement organizations in the early 20th century: 1) Technocratic advocacy of improved efficiency in labour markets through greater transparency;² (2) social reform efforts to ameliorate unemployment; 3) working class political demands.³ These various strands of advocacy and argumentation were, of course, in practice intertwined (Bekkum 1996).

Although placement activities were frequently initiated by organizations working in the area of poor relief in the early 19th century as part of a more active approach to dealing with their clientele, it was not until the 1880s that general public labour exchanges are actually established in many European cities, for example, Berlin (1883), Vienna (1885), Amsterdam (1886), Paris and Bern (1887), Brussels (1888), Liège (1889).. Often

¹ The implicit argument here is that many firms and most individual jobseekers will under invest in these services.

² Typical for the technocratic approach is the liberal economist G. de Molinari who called for the creation of an inter-city network of state-financed "labour exchanges" analogous to stock exchanges to improve the efficiency of labour markets. The labour exchanges were to be supervised by public officials, who would publish daily information on vacancies and jobseekers and on prices, but private intermediaries would actually operate the exchange. The advantages of the scheme were said to be the creation of national, or even international, markets for labour and enhanced economic growth by channelling workers into sectors with higher value added, reducing regional wage disparities, and raising wages (Bekkum 1996).

³ For example, a major innovation of the revolutionary government of 1848 in Paris was the establishment of labour exchanges in all city districts. This was a reflection of proposals that had been advanced in the early 1840s, which called even for public job creation if insufficient regular jobs were available and an employer-financed fund to guarantee the payment of workers' wages. The Paris labour exchanges were subsequently abolished after the coup d'etat of December 1851 that brought Louis Bonaparte to power with the argument that they were "dangerous institutions which would fuel the

initiated by private citizens or civic associations, government subsequently became involved by granting subsidies or integrating them into the public service (Bekkum 1996).

The rationale for these institutions was typically improved efficiency in the functioning of the labour market through greater transparency and providing a mechanism to improve job matching. The new labour exchanges were seen above all as "a weapon against unemployment," which in the course of the prolonged depression of the last quarter of the 19th century had become a distinct political issue for the first time. In Germany they were also seen as "a means to neutralize class struggle" between employers and trade unions, who were increasingly tending to organize their own placement institutions to oppose one another (Bekkum 1996).

The establishment of public employment services on a national scale was an integral part of the development of welfare state institutions, especially unemployment insurance systems. Although the labour exchange movement was strongest in Germany, it was in the UK that a nation-wide public placement services was established for the first time in 1910 in connection with the introduction of a national system of unemployment insurance. Agreement on the establishment of a national placement service was first reached in Germany in 1918 in the context of post-war and enacted into law in 1922 (Arbeitsvermittlungsgesetz). It provided a tripartite administration and foresaw a general ban on fee-charging agencies, which was to come into effect at a later date. The establishment of a placement service preceded only a few years the introduction of unemployment insurance in 1923-24. Placement services and benefit administration were merged in a unified organization, Reichsanstalt für Arbeitsvermittlung und Arbeitslosenversicherung, in 1927.

expectation that government could be made responsible for providing employment for all (Bekkum 1996)."

As Bekkum (1996) observes, hostility to private intermediaries was strong in the trade unions in every country, who tended to regard them as "competitors to their own activities," and suspect as "instruments geared to the interests of employers." Nevertheless, trade unions were not at first advocates of public employment services, to which they were initially indifferent or opposed. Only after their own efforts to develop placement services were not very successful in comparison with those of employers, did they support the movement for public employment services in order to strengthen opposition to private agencies.

While the origins of the PES suggest that market failure was important, especially the failure of competing private organizations to create sufficient market transparency and to adequately serve the unemployed, the rationale for public placement services cannot be viewed in isolation from other labour market roles of the PES, initially benefit administration and prevention of abuse and subsequently responsibility for active measures. Today, after PES placement services have been established for more than 50 years (and frequently as monopoly providers), the principal issue is possible government failure rather than market failure. Policy makers have responded by liberalizing placement services, extending private competition or, in some cases, permitting it for the first time.

2 Public Employment Service Market Share

Broadly speaking, the PES's core task in placement services is to bring together jobseekers and vacancies in the labour market by providing information on vacancies or by referring jobseekers to particular employers. A good functioning placement service may contribute to economic efficiency by reducing search costs, improving job matching, and reducing the duration of vacancies. Its contribution to increasing employment (or reducing unemployment) should not, however, be overestimated; it does not create jobs but merely contributes to filling them faster or better.

This suggest three possible measures of the PES market share in placement services:

- The rate at which employers report external vacancies (i.e. excluding job changes within the firm) to the PES;
- Use of the PES as a search channel by job seekers;
- The percentage of all hires on the external labour market that result from PES mediation.

PES placements as a percentage of all hires is the most frequently used definition of market share.

2.1 Estimates of public employment service market share

Data on vacancies notified to the PES by employers and on PES placements as a percentage of all hires are, in many cases, not strictly comparable. The principal problem is that the number of vacancies and the number of hirings in the economy are not known from PES records and must be estimated from other sources. Only a few countries (e.g. the Netherlands and Germany) conduct systematic employer surveys on recruitment practices.

Moreover, PES data collection practices also differ, sometimes markedly. As a rule placements refer to vacancies that are notified to the PES and filled by jobseekers registered with the PES. The extent to which the PES records vacancies filled may be affected by administrative practices such as the reliance on open placement systems in which information on vacancies notified is made available directly to jobseekers without any mediation by placement officials. The extent to which short-term placements lasting only a few days are included varies across countries, as does the inclusion of placements in subsidized employment, which are a captive PES market. Practice in reporting vacancies also varies greatly in some cases; the very high Norwegian notification rate, for example, is appar-

ently due to the Norwegian PES's practice of also including publicly advertised vacancies in its own data base (OECD 1996). Despite these qualifications, the data on PES market share are informative.

Focusing on PES placements as a percentage of total hirings, there is a broad spectrum of PES impact, ranging from lows of around 5% in the USA and Switzerland to highs of 25% to 30% in West-Germany, Sweden, Italy and the UK (Table 1). The average "market share" in all hirings for these countries is 16.4%, i.e. ca. 85% of placements take place through other search and recruitment channels. In the EU countries for which data are available this quota is slightly higher (18.5%). This suggests that PES placement activity plays a role in at most about 20% of total hirings.

Even these rather low estimates may in many cases actually overestimate the market share of the PES. Although PES administrative data may in some cases undercount placements, on the whole administrative data appear to overstate the PES's role in placement (Dercksen and de Koning 1995). This is due in particular to the usual assumption that vacancies that are notified to the PES and filled by jobseekers registered with the PES are mediated by the PES. This is implausible given the multiplicity of search channels available to both jobseekers and employers. For example, in Germany the official estimate of 24.3% in 1992 can be compared with data collected in an employers survey of recruitment practices since 1989. These surveys indicate that the actual placement rate may be significantly lower. Thus for West Germany a survey of employers concluded that the PES was the successful search channel in only 13% of all hires, excluding placements into apprenticeships and subsidized employment. More important were advertisements (42%), information provided by other employees (16%) and direct applications alone accounted for (12%) of all hires. Our own analysis of successful search channels as reported by jobseekers in the German Socio-Economic Panel indicates a similar PES market share (see 5.3 below).

In all countries for which data are available use of the PES as job search channel by jobseekers (% PES registered) is significantly higher than the percentage of jobs notified to the PES or its estimated market share in placements. The PES registers a very large share of jobseekers but only about 1/4 to 1/3 of openings are notified to it by employers, which is indicative of the structural imbalance in job matching that confronts the PES in slack labour markets.

2.2 Is market share important?

Although market share is widely used as an indicator for the effectiveness of the PES, the appropriateness of this definition of the goals of PES activities has been questioned. As in the case of any labour market program it is also important to distinguish between gross and net effects in placement services (Walwei 1995). Most unemployed would have found employment in any case or only after a slightly longer search period through other channels (deadweight) even without the assistance of the PES; moreover, individual assistance to some jobseekers may be at the expense of other jobseekers (substitution).

For example, de Koning (1997) argues that the PES should focus its resources on the long-term unemployed and other problem groups and that it would be wrong to aim for "market share" by achieving easy placements for workers with a strong labour force attachment. This argument is based on the high deadweight effects of the PES serving jobseekers whose employment prospects are favourable in any case. From this point of view it is preferable to target more cost-intensive activities of the PES on problem groups, and striving for market share leads to "creaming." Moreover, based on a study of the performance of Dutch regional labour offices, Dercksen and de Koning (1995) find no support for the assumption that a

Table 1: Estimates of PES Market Share by Various Definitions in Early 1990s

| Country | Commercial placement since | Employers' PES notification rate (% vacancies) | PES Registered Job-Seekers (% all jobseekers) | PES placements (% hires) |
|-----------------------------|----------------------------|--|---|--------------------------|
| Austria ³ | 1994 | 26.7 | --- | 12.0 |
| Australia ³ | 1947 | 25.5 | --- | 16.7 |
| Belgium ³ | --- | 25.3 | 77.28 | 16.9 |
| (West)-Germany ³ | 1994 | 34.5 | 75.97 | 24.5 |
| Denmark ⁴ | 1990 | 19.0 | 64.77 | 10.0 |
| Spain ⁵ | --- | 23.0 | 86.11 | 22.0 |
| Finland ⁵ | 1994 | 32.0 | --- | 17.0 |
| France ¹ | --- | 28.0 | 64.76 | 12.0 |
| Greece ⁵ | --- | --- | 10.50 | --- |
| Ireland ³ | 1971 | 19.6 | 59.65 | 9.8 |
| Italy ¹ | --- | --- | 74.43 | 30.0 |
| Japan ⁵ | --- | 51.0 | --- | 14.0 |
| Luxembourg ⁵ | --- | --- | 46.74 | --- |
| Netherlands ⁵ | 1991 | 23.0 | 67.95 | 14.0 |
| Norway ⁵ | --- | 76.0 | --- | 18.0 |
| Portugal ⁵ | --- | --- | 63.24 | --- |
| Sweden ³ | 1993 | 36.3 | --- | 24.8 |
| Switzerland ⁵ | 1910 | 9.0 | --- | 4.0 |
| United Kingdom ⁵ | 1850 | 39.0 | --- | 29.0 |
| USA ² | 1920 | 8.9 | --- | 4.8 |

Notes: ¹ = Data ref. to =1990, ²=1991, ³=1992, ⁴=1993, ⁵=1994

Sources: Walwei 1994; OECD 1996c; Eurostat European Labour Force Survey various years; own calculations.

higher PES market share is associated with better results in placing problem groups (the so-called "carrier wave theory").⁴

One possible way out of this dilemma is for the PES to strive for a large market share in reported vacancies rather than placements. Without a large pool of vacancies and good contacts to employers it is difficult to place problem groups. Based on a high level of reported vacancies, an open file system in which people can look for jobs on their own could be made available to all jobseekers, most of whom can find a job on their own, and intensive PES services could be concentrated on problem groups that need them. Such an approach might enable the PES to target its resources more efficiently without sacrificing market orientation.

2.3 Broader indicators of impact on search behaviour

Job matching is, of course, only one type of PES activity and may underestimate the actual impact of the PES:

- The PES also offers job search assistance and counselling as well as training programs to individuals to improve the intensity and effectiveness of their employment search and to increase their attractiveness for potential employers.
- The PES also intervenes directly in the job market by subsidizing employment opportunities, especially for individuals from problem groups (e.g. long-term unemployed), either by offering employment subsidies to employers in the private sector or by sponsoring public service employment projects in the public or non-profit sectors. Entries into active measure constitute a considerable of outflows from the unemployment registers in most countries, ranging from ca. 10% in the UK to ca. 50% in Finland and Sweden in recent years (OECD 1996: Table 5, p.31).

⁴ Alternatively, it can be argued that not share in hires but share in vacancies reported to the PES is crucial for PES assistance to problem groups (e.g. the long-term unemployed; see de Koning 1996).

- The PES is in every country the most important single contact to the unemployed through registration and benefit administration procedures (see registration rates in Table 1). The Level and duration of benefits also has an important impact on search behaviour and the readiness of the unemployed to accept the applicable rules and regulations (Atkinson and Micklewright 1991).

The impact of diverse PES activities on the search intensity of the unemployed may be even more important than placements.⁵ Moreover, PES activities may also have a significant employment effects on the macro level by increasing labour force participation and other positive effects on labour supply that have a moderating impact on wages (Layard, Nickell, Jackman, 1991).

3 Market Share and Market Segment of EU Public Employment Services: Evidence from Labour Force Surveys⁶

3.1 Possible determinants of public employment service market share in cross national comparison

What types of factors influence PES market share? Three types of factors appear important: 1) **institutional determinants**, especially the placement services regulatory regime and implementation structure; 2) **policy variables** such as the quality of services to employers and employees, PES placement strategies, or the availability of other active measures and

⁵ Hazard rate analysis PES users and non-users by Katz and Jacobson estimated that not only PES placements but also PES referrals not resulting in placements reduced the duration of unemployment spells (Jacobson 1994: 15ff). The latter effect can be interpreted as evidence for the impact of PES on search intensity, even in cases in which it does not directly result in placement.

⁶ Earlier versions of this chapter were presented at the Eighth EALE Annual Conference, September 19-22, Chania, Greece and at the Employment Observatory System Conference, Vienna, October 24-25, 1996 in Vienna. The authors would like to thank participants in both conferences for helpful comments and suggestions.

of unemployment benefits; 3) labour market variables, especially labour market conditions and structural features of the relevant labour market.

3.1.1 Institutional determinants

The role of **institutional determinants** have been strongly emphasized in recent discussions about liberalization of placement services. The existing comparative literature on trends in PES market share and its determinants has largely focused on the issue of demonopolization of employment services, which has been a prominent policy issue in a number of EU countries in recent years (Butler and Walwei 1995, Walwei 1996). It is at least a plausible hypothesis that **monopoly status**, i.e. prohibition of competition will ceteris paribus strengthen the PES's market share. A related argument for a PES monopoly is that private competition leads to a sort of '**creaming**' effect in placement services in which more suitable jobseekers become customers of the private agencies and the PES is left, after a downward spiral, with the problem groups on the labour market.

In recent years there has been a strong liberalization trend that has led to the abandonment of prohibitions against commercial placement services in several countries. Recently, Austria (1984), Denmark (1990), Germany (1994), Finland (1994), the Netherlands (1991), Portugal (1989) and Sweden (1993) have fully demonopolized placement service (see Table 1); private competition has already been permitted for some time in Ireland (1971) and the UK (1850) as is the case outside the EU in, for example, Australia (1947) Switzerland (1910), the USA (1920), and New Zealand.⁷

Non-profit placement activities should also be mentioned. These are important and neglected placement service institutions with considerable potential. These are typically trade unions and professional organizations,

schools and training organizations, community and voluntary organizations assisting hard-to-place persons or special groups (e.g. students).

Finally, in a number of monopoly countries employers are formally obligated to notify external vacancies to the PES (e.g. Belgium, France, Finland, Italy, Spain). Although this regulatory requirement may have some positive impact on the rate of notification of vacancies to the PES, it appears to be unenforceable and widely ignored in practice. In some countries, e.g. Norway, it provides a legal basis for inclusion of all publicly advertised vacancies in the PES's data base.

Differences in the **horizontal integration** of placement activities with other labour market services in institutional regimes of labour market policy may also play an important role. In a comparative perspective, it is important to recall that the PES has very different responsibilities in different countries. Thus in some countries of the European Community the three classical functions of labour market policy (placement services, management of active programs, and administration of unemployment benefits) are the responsibility of a comprehensive or fully integrated PES (Austria, Germany, Greece, Italy, Luxembourg, Spain) in others the PES is only responsible for placement and other active programs (e.g. labour market training, subsidized employment etc.) but not for administration of unemployment benefits (Belgium, Denmark, Finland, Ireland, Netherlands, Portugal, Sweden). Finally in two EU Member States (France and the UK) there are special institutional configurations. France has the most fragmented implementation structures with separate implementation structures for placement services (ANPE), labour market training (AFPA) and benefit administration (UNIDIC). In the UK the Employment Service is responsible for placement services and benefit administration, whereas

⁷ Dates of introduction of private competition are from Walwei's survey carried out for the International Social Security Association (Walwei 1994). No date of introduction available for New Zealand.

training and most other active programs are the responsibility of the Training and Enterprise Councils (TECs). In some countries the PES also has other important functions such as work health and safety inspections, authorization of dismissals, approval of short-time work, which may give it considerable leverage with employers in the labour market.

These institutional choices and the way in which placement services are integrated in the broader implementation structure are thought to have important consequences for the functioning of the PES. For example, the conventional wisdom (as represented, for example, by the OECD) on whether placement services and benefit administration should be located in the same agency has shifted from advocating a separation of these two function in the 1960s and 1970s to advocating their integration in the 1980s.

Changes in the UK over the last 20 years, for example, illustrate how this policy wheel has turned a full circle. The previous tripartite labour market authority (MSC), which was responsible for most active programs and placement services from 1973 to 1988, was by design strictly separated from benefit administration.⁸ The MSC represented an effort at corporatist-type integration of trade unions and employers in public policy-making in context of a new commitment to active labour market policy (in a period of initially relatively tight labour markets). Besides securing their co-operation at the industry and firm level, it was anticipated that a corporatist organization of active labour market policy could mobilize greater political support for such policies ("lobbying function"; Reissert 1984). The separation of placement and other active measures from benefit administration was a principal institutional rationale for the old MSC. Labour

⁸ The unemployment benefit offices, which had already been separated from placement services in 1971, were a separate organization within the Employment Department with sole responsibility for administering benefits and controlling availability for work. In 1982 even the obligation of the unemployed to register with the placement service was eliminated. See Reissert 1985:5-13 for an overview of the earlier organization of labour market policy in the UK.

exchanges had been criticized as being primarily concerned with the routinized and rule-oriented (bureaucratic) task of benefit administration and incapable of adequately performing service-oriented placement tasks for employers and employees. Placement and especially training programs, it was argued, require flexible responses to diverse and changing local labour market conditions, individual jobseekers, and potential employers. These personal and organizational characteristics were regarded as being antithetical to the routinized and rule-oriented administration of unemployment benefits. Furthermore, it was argued that organizational fusion of the two functions tended to stigmatize the public placement service ("down-market image"), discouraging both employers and job seekers from using its services. The change was designed to give placement service a more "up market" image as service primarily devoted to meeting employers' needs. In subsequent practice, however, the public placement service remained largely confined to the lower tier of the job market.) In the late 1980s the organization of labour market policy was completely restructured. An implicit premise of this shift in institutional design was a change in PES "market strategy" away from being a mainstream placement agency toward targeting of placement activities on problem groups, especially the long-term unemployed, in a period of persistent mass unemployment. First, the employment service (placement) was removed from the MSC in 1987/88 and subsequently given direct responsibility for benefit administration. While merging the functions of placement and benefit administration may risk stigmatizing the placement service in the eyes of many employers and jobseekers as an "unemployment agency," their institutional separation may create co-ordination problems in controlling the availability for work of the unemployed, for example, in countries such as the Netherlands or Denmark with multiple sectoral level unemployment insurance funds. Moreover PES strategies that aim at the "activation" of unemployed benefit recipients through more stringent job search and availability for work requirements may be impeded in labour market

regimes that separate responsibility for benefit administration in separate organizations, especially trade union administered unemployment insurance funds (e.g. Sweden, Finland, Denmark, Netherlands). Furthermore, tripartite administrative boards may inhibit such strategies even in PES regimes with comprehensive labour market authorities.

Similarly, active labour market policy measures for training and subsidized employment, e.g. in the form of wage subsidies for employment in the regular labour market or public job creation, play an increasingly important role in all countries. Obviously placement services and active measures require co-ordination in order to be effective in integrating the unemployed into regular employment. Moreover, active measures play an important role (but questionable) role in controlling the availability for work of the unemployed in an era of mass unemployment. Last but not least, a PES that deploys extensive resources for active programs is more attractive for both jobseekers and employers filling vacancies, thus augmenting its impact on the labour market.

In summary, a comprehensive employment service that combines placement, responsibility for active programs and benefit administration might be expected to have more leverage with employers and job seekers. Alternatively, an active comprehensive employment service without responsibility for benefit administration may prove more attractive to employers and employed jobseekers due to the absence of the **stigma effect** of being an "unemployment agency" and the possible **displacement effect** of benefit administration on the personnel and financial resources available for placement activities.

3.1.2 Policy variables

Policy variables can also be expected to have an impact that improve the quality of PES services, for example, by expenditure per unemployed person or the ratio of placement and counselling personnel to the number of unemployed served would be positively related to the use of PES services

by employers and jobseekers and to its share in total placements as should expenditure on and the number of participants in active measures, insofar as they are integrated with placement service activities. The importance of this factor is illustrated by the percentage of outflows from the unemployment register that is accounted for by entrants into active measures. While in Austria and the UK active measures account for only ca 10% of outflows from employment in recent years, it ranges from 20% to 30% in Denmark, Italy, the Netherlands, Norway, and Switzerland, and 30% to 50% in Finland, Germany and Sweden in recent years (OECD 1996).

Unemployment benefit coverage can be expected to have a significant impact on use of the PES as a search channel by jobseekers because receipt of benefit entails registration and search obligations for the unemployed. The PES registration base of jobseekers is also an important asset in making it attractive for employers to notify vacancies.

Finally, the service strategies of the PES are important, for example, whether they give priority to market share or to targeting of resources on problem groups or the extent to which acquisition of vacancies is given a high priority.

3.1.3 Labour market and structural determinants

National differences and shifts in the structure of industry and the composition of the workforce are also important determinants since the PES market share is historically greater in specific labour market segments.

Thus we would expect the PES share in search activity and placements to be greater, for example, for dependent employment, among unemployed rather than employed jobseekers, full-time rather than part-time work, for blue collar rather than white collar jobs, among the intermediate and low skilled rather than the high skilled.

3.2 Liberalization of EU placement service regimes and public employment service market share

There are several more or less clearly articulated hypotheses concerning the impact of private competition on the market share of the public employment service (PES) that we would like to examine. The first relates to the displacement of PES by PRES in job matching and the second to the clientele or labour market segments served by the PRES and PES:

1. On the one hand, it is argued that private employment services (PRES) displace public employment services (PES) leading to lower PES market share. If this is true, the existence and market share of PRES is presumably an important reason for cross-national differences in PES market share.
2. On the other hand it is argued that the PRES creams the labour market, serving the employed rather than the unemployed, the better trained rather than the unskilled, and those with a strong labour force attachment rather than problem groups, which implies that PRES complements rather than displaces the PES because it serves a different market segment.

Briefly stated, our argument in this section will be that 1) The importance of the PRES in explaining cross-national differences in PES market share is overstated because this search and recruitment channel is in fact quantitatively of limited importance. The main competition for the PES comes from other formal and informal search channels (advertisements, direct applications to employers, friends and acquaintances etc.) and not from PRES, even in countries where it is permitted. 2) The clientele served by the PRES is surprisingly heterogeneous and differs only in degree from that served by the PES. The PES and PRES are complementary not because they serve markedly different clienteles but because there is a

great deal of overlap in individual search channels; most PRES job-seekers also use the PES.⁹

In order to assess the impact of liberalization on PES market share we require ideally comparable cross-national data on PES and PRES market shares. Unfortunately, as discussed above, available estimates of PES market share from administrative data are unsatisfactory and no systematic data are available on the PRES. It is, nevertheless, evident from the estimates reported in Table 1 that, although the PES market share is exceptionally low in some countries with a tradition of commercial placement (e.g. USA, Switzerland), this is not always the case. Thus the UK has, despite its liberal tradition in placement services, a PES market share that is significantly above that in many "monopoly" countries. Conversely, PES monopoly status does not always entail a high market share (e.g. Austria, France). Many other factors, including the quality of the services offered by the PES, play an important role (Mosley 1997; Buttler and Walwei 1995).

3.2.1 European Labour Force Survey data on job search methods

In the remainder of this section we examine indirect evidence on PES and PRES market share and market segment from the Community Labour Force Survey on "main method of job search" used by jobseekers, including public and private agencies. This information on the search channels used by jobseekers is of course no substitute for reliable data on market share in hirings, but it does provide important insights into one dimension of the role of the PES and PRES in jobmatching and into the interrelationship between them in European employment service regimes. Moreover, it provides direct information on the characteristics of their respective clienteles among jobseekers.

⁹ The answer depends also of course in part on the regulatory regime; in the past some systems have allowed PRES competition only in specialized market segments (e.g. executive search, performing arts).

The European Labour Force Survey (ELFS) is conducted under the auspices of the Statistical Office of the European Communities (EUROSTAT) in Luxembourg. The ELFS is not a separate survey conducted directly by Eurostat but a systematic compilation of national labour force surveys, which now include a standardized set of questions asked in all EU member states.¹⁰ The great advantage of these data is that in principle comparable results for all EU countries are available from a single source. Their principal shortcoming is that the results are only available in aggregated form and not as individual data due to privacy protection restrictions in some countries. Furthermore, there are inevitably problems in standardizing questions and responses across diverse cultures and employment systems. Finally, the conversion of national survey results into the common data base is not always transparent: the recoding of the national results into the Eurostat common format is carried out by the national authorities and not supervised by Eurostat or fully documented.¹¹

European Labour Force Survey results on "main method of job search" used by jobseekers, including public and private agencies, are available on an annual basis for the years 1983-1994.¹² However, there was a major revision of the survey instrument after 1992, which makes some current questions, including that on job search method, not comparable with earlier years. Both the old and new questionnaires ask whether the respondent is registered at a public employment office and receiving benefits. The principal difference in the question on job search method is that the question used from 1983-1991 asks about the "main method employed during the last four weeks to find a job other than being registered

¹⁰ ELFS data for the new member States, Austria, Sweden, and Finland, are not available for the years prior to 1995 and are thus not included in this study.

¹¹ See the discussion of problems with the question on job search method below (4.2.2).

¹² The ELFS was also carried out on a biennial basis in earlier years but the results are comparable only to a limited extent due to changes in the survey design.

at an official employment exchange" whereas the current version as of 1992 asks about the "main method used during the previous four weeks to find work including the option of "contacted public employment office." We will refer to results from both forms of the survey question in the following (see text of ELFS harmonized questionnaire in insert).

European Labour Force Survey Job Search Method Questions, 1983-91 and 1992 Series

Job search method

1992 series:

Main method used during previous four weeks to find work (cols. 73/74)

1. Contacted public employment office to find work
 2. Contacted private employment agency to find work
 3. Applied to employers directly
 4. Asked friends, relatives, trade unions, etc.
 5. Inserted or answered advertisements in newspapers or journals.
 6. Studied advertisements in newspapers or journals
 7. Looked for land, premises or equipment
 8. Looked for permits, licenses, financial resources
 9. Awaiting the results of an application for a job
 10. Waiting for a call from a public employment office
 11. Awaiting the results of a competition for recruitment to the public sector
 12. Other method used
 13. No method used
 - 99 Not applicable (col. 69/70=03-10, blank or col. 46=0, blank)
- Blank No answer

1983-1991 series:

Main method employed during past 4 weeks to find a job other than being registered at an official employment exchange (col. 39).

0. Being on a register at a private employment office including careers office or job centre¹³
1. Awaiting results of a competition for being recruited in the public sector.
2. Inserted advertisements in newspapers or journals.

¹³ In the pre-1992 series the ELFS code book classifies PES registered jobseekers in the UK in the same category as users of a private agency because the unemployment benefit claimants are not required to register with the PES in the UK (Eurostat 1988). This odd formulation has in fact no effect because no one in the UK is reported as registered with the PES (see Figure 10 below).

- 3. Answered advertisements in newspapers or journals.
- 4. Applied to employer directly.
- 5. Asked friends, relatives, colleagues, trade unions, etc.
- 6. Studied situations vacant columns in newspapers, etc.
- 7. Other methods used (to be specified to the interviewer)
- 8. No method used
- 9. Not applicable
- Blank No answer

2. Registration with PES and benefit status

1992 series:

Filter: Everybody aged 15 years or more

Registration at a public employment office (col. 79)

- 1. Person is registered at a public employment office and receives benefit or assistance
- 2. Person is registered at a public employment office but does not receive benefit or assistance
- 3. Person is not registered at a public employment office but receives benefit or assistance
- 4. Person is not registered at a public employment office and does not receive benefit or assistance
- 9 Not applicable (child less than 15 years)
- blank No answer

1983-91 series:

Registration at an official employment exchange (col. 38)

Filter: Everybody 14 years and older

- 1. Person is registered at an official employment exchange and receives benefit or assistance.
- 2. Person is registered at an official employment exchange and does not receive benefit or assistance
- 3. Person is neither registered at a careers office nor at an official employment office nor at a job centre but receives benefit or assistance.
- 4. Person is not registered at an official employment exchange and does not receive benefit or assistance
- 9. Child less than 14 years old.
- Blank No answer.

Source: Eurostat, **Labour Force Survey. Methods and definitions, 1992 series**, Luxembourg: Office for Official Publications of the European Communities, 1992; Eurostat, **Labour Force Sample Survey. Methods and definitions**, Luxembourg: Office for Official Publications of the European Communities, 1988.

Initially, we present descriptive results for the period 1992-1994. In most cases the data are pooled for the 3 year period 1992-1994 in order to have statistically reliable results for EU countries with smaller populations. This approach also has the advantages of smoothing the impact of differences in the business cycle in a cross-section analysis.

Reported use of the PES and other job search methods by individuals gives us of course only a one-sided (supply-side) and incomplete picture. It provides no information on the recruitment channels used by employers (demand-side), for which employer surveys are necessary. Moreover, unlike some national survey with rolling samples, the annual ELFS provides no information on the outcomes of job searches and the success rate of different search channels.¹⁴ Nevertheless, these ELFS data on individual job search methods do provide evidence on the relative importance of the PES (and private placement services) in individual job search behaviour in the EU and on the characteristics of their clientele that is not otherwise available for all EU countries.

Unfortunately the EUROSTAT survey question provides information only on the "main search method" within the last four weeks and does not permit multiple responses.¹⁵ Moreover, we have no information from the ELFS on the type of PES contact that took place.

In the following discussion ELFS data on individual search channels are reported and analyzed from two somewhat different perspectives: the market share of the PES (or PRES), i.e. the percentage of respondents that reports use of the search channel within the past four week, among all jobseekers and indifferent labour market segments (4.2.2) and the structure of the clientele of PES and PRES users by different personal and labour market characteristics (4.2.3).

3.2.2 Public and private employment service market shares among individual search channels

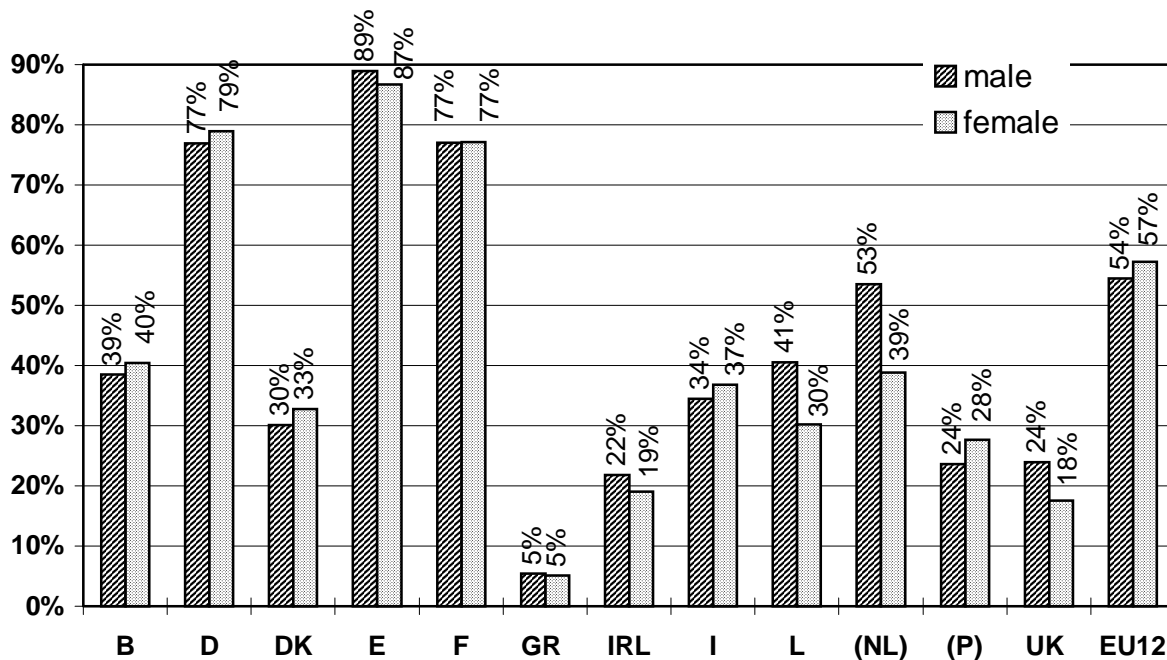
The percentage of jobseekers reporting that the PES was their main search method in the previous four weeks varies considerably among EU countries. The general pattern, which is consistent across all labour mar-

¹⁴ This would require longitudinal data that is not available in the ELFS.

¹⁵ See, for example, Toharia (1996) and Bortnick and Ports (1991), who use the number of search channels used by individuals as an indicator for search intensity.

ket segments, shows Germany, France and Spain with exceptionally high reported use of the PES of between 75% and 90% (Figures 1). Of the remaining EU countries Belgium, Denmark, Italy, Luxembourg, and the Netherlands show values between 30% and 50% for PES main search

Figure 1: PES Main Search Method, All Job-Seekers, 1992-94



Source: Eurostat European Labour Force Survey, own calculations

Only persons with at least one search method are included.

Data for the Netherlands, Portugal and Ireland for unemployed and inactive only.

method within the last 4 weeks followed by Portugal, Ireland, and the UK with 20% to 30% and Greece with an exceptionally low reported PES rate of around 5%, which is probably a reflection of the high rate of self-employment in the Greek economy (ca. 50%).¹⁶

These very high rates in France, Germany, and Spain overstate actual use of the PES for technical reasons, although it does play an important

role in individual job search in these countries (see Table 1). In the 1992-94 ELFS data an undocumented coding convention leads to classification of all registered unemployed persons as using the PES as their main search method. Apparently, these countries have not yet implemented the revised European Labour Force Survey question on job search method introduced in 1992. For this reason Germany, France, and Spain are excluded from the following analysis of PES main search method for the 1992-94 period.¹⁷ The detailed data on the PRES clientele discussed below (4.2.3) are drawn from the 1989-1991 survey results, which are unaffected by this problem.

Labour market segments

Unemployed persons are, depending on the country, two to four times more likely to use the PES as main search method than are employed persons (Figure 2). This probably reflects the fact that the employed are "insiders" for whom other informal search channels are more readily available through work contacts. Moreover, the unemployed are likely to come into contact with the PES in any case through receipt of unemployment benefits and related job search and reporting requirements. These marked differences in PES uptake by employment status suggests that national differences in the level of unemployment and in benefit coverage may be important explanations for the reported national differences in use of the PES as main search method.

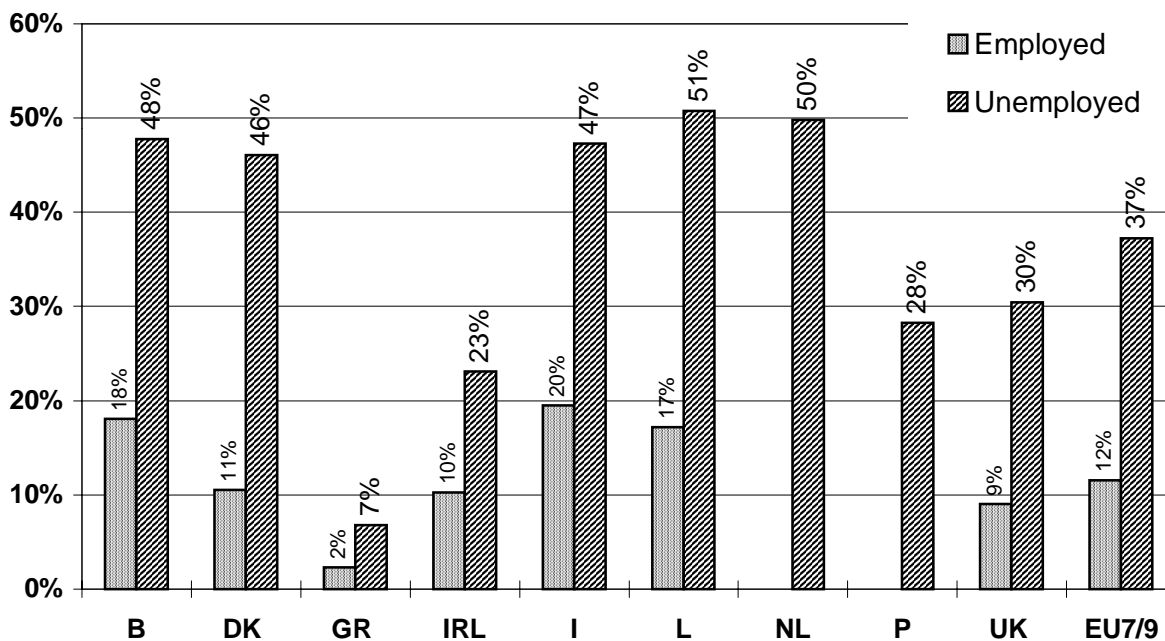
Gender differences in the use of the PES as "main search method" are by contrast relatively small and inconsistent across countries, except in Lux-

¹⁶ Because the reported data for all jobseekers in the Netherlands and Portugal do not include the unemployed, PES use is overestimated by ca. 10%.

¹⁷ A major shortcoming of the European Labour Force Survey is that there is apparently no systematic documentation or control of the implementation of the common survey instrument by national authorities, which seriously detracts from its reliability as a scientific survey instrument.

embourg, the Netherlands and the UK, where men are considerably more likely to use the PES than women (see Figure 1).

Figure 2: PES Main Search Method, Employed and Unemployed Job-Seekers, 1992 - 94 (in %)



Source: Eurostat European Labour Force Survey, own calculations

Only persons with at least one search method are included.

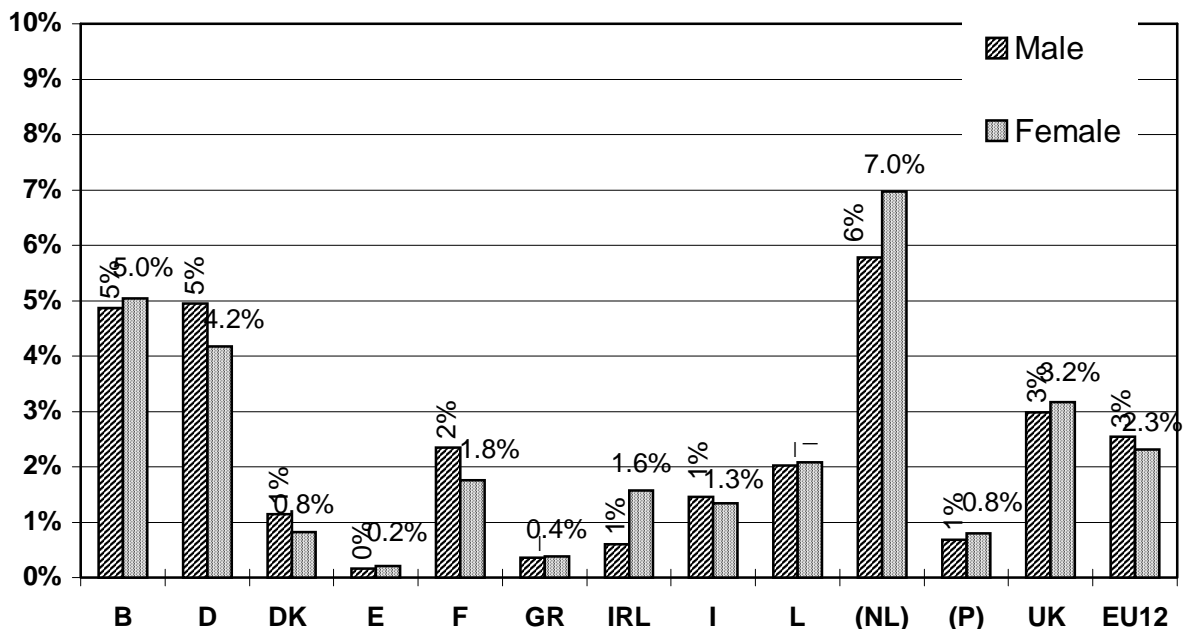
Data for the Netherlands, Portugal and Ireland for unemployed and inactive only.

Public (PES) and Private (PRES) Placement Services

The Eurostat data provide insight into the importance of private employment services (PRES) as a search channel in EU countries. The percentage of respondents reporting contacting PRES as "main search method" over the 1992-1994 period is highest in Belgium (ca. 5%) followed by the UK (ca. 3%) and Luxembourg (ca. 2%). PRES are of major importance in the Netherlands too (ca. 6 to 7%), although the data are not strictly com-

parable (Figure 3).¹⁸ Although underestimated due to the coding convention mentioned above, the percentage of jobseekers using PRES is rela

Figure 3: PRES Main Search Method as Percentage of All Job-Seekers, 1992 - 94



Source: Eurostat European Labour Force Survey, own calculations

Only persons with at least one search method are included.
Data for the Netherlands, Portugal and Ireland for unemployed and inactive only.
Values indicated by a dash (-) are statistically unreliable.

tively high in Germany (ca. 5%) and France (3%).¹⁹ In all other countries PRES are used as "main search method" by an insignificant number of jobseekers (<1%). It should be noted that the ELFS survey question on PRES does not distinguish between different types of private employment agencies so the results reported include commercial employment services, temporary work agencies, as well as non-profit labour market intermediaries.

The LFS results from the years 1989-91 provide additional information under a less restrictive definition: Main search method during the last 4

¹⁸ They are based only on the responses of unemployed and inactive jobseekers.

¹⁹ This is also confirmed by examination of reported PRES use by jobseekers in France and Germany in the 1989 -1991 data series, which is unaffected by the technical problem mentioned.

weeks "other than being registered at an official employment exchange." Reported user rates (here unaffected by the coding convention used in the 1992-94 data) show a similar cross-national pattern but are greater by a factor of 3 to 4 than those reported in the 1992-1994 series:²⁰ Germany and the UK show the highest percentage of PRES at around 24% of all jobseekers followed by Ireland, the Netherlands, France, Denmark and Belgium ranging from 20% to 8% (see Figure 4). Reported use in other EU countries is negligible. Because the data for the Netherlands do not include employed jobseekers, use of PRES is probably somewhat underestimated in that country.

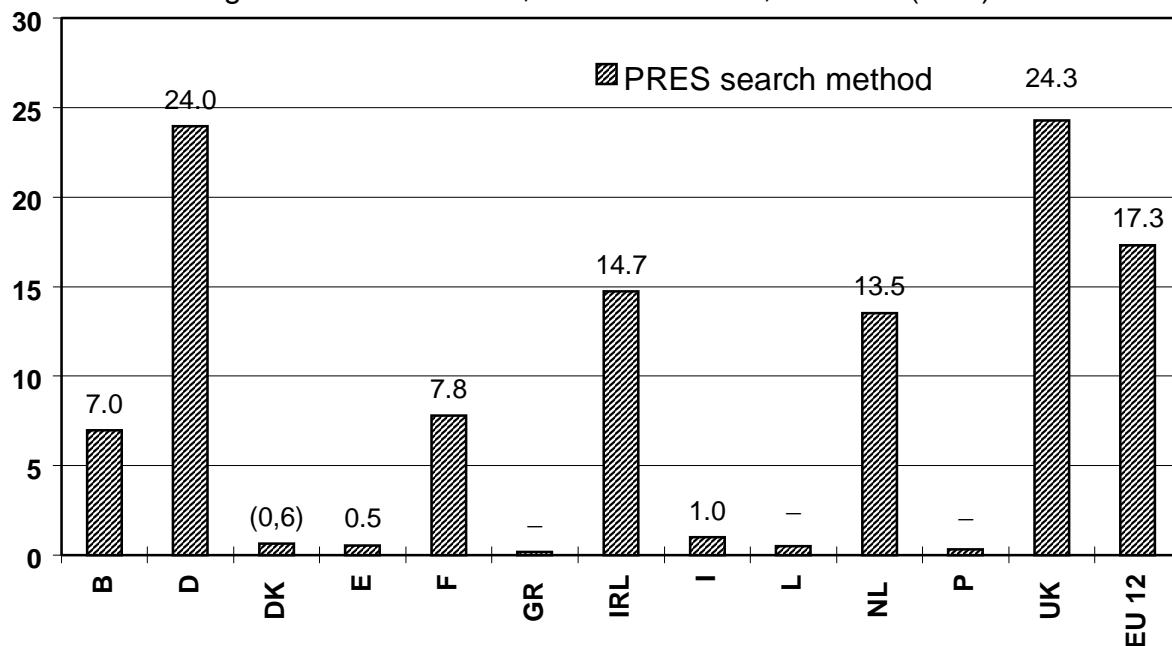
Although the ELFS data do not distinguish between different types of placement services, the relatively high percentage of PRES users in what were at the time "monopoly" countries such as Belgium, France, and Germany is probably indicative of the importance of temporary work agencies in these countries.

Although reported PRES use is as a rule higher among the employed, there is significant use by the unemployed (Figure 5). In Belgium the data show that use is clearly significantly higher among the unemployed (5.9 % vs. 3.2%) than the employed. The reported rate of use among the unemployed is also high in the Netherlands (6.5%), where there are no data on search method for the employed.

Figures 6 and 7 compare PES and PRES 'market shares' as "main search method" for all jobseekers and unemployed jobseekers respectively for 9 countries for which data are available. There is no evidence for a trade-off between use of PES and PRES as main search method, i.e. that uptake of PRES displaces PES. Indeed, use of the PES is positively related to use of PRES; the three countries with the highest PRES reported use also have a high rate of use of the PES in job search.

²⁰ Due to the less restrictive definition (see 4.2.1 above).

Figure 4: Use of PRES, All Job Seekers, 1989-91 (in %)



Source: Eurostat European Labour Force Survey, own calculations

Only persons with at least one search method are included.

Data for the Netherlands, Portugal and Ireland for unemployed and inactive only.

Values indicated by a dash (-) are statistically unreliable.

Figure 5: PRES Main Method, Employed and Unemployed Job-Seekers (%), 1992 - 94



Source: Eurostat European Labour Force Survey, own calculations

Only persons with at least one search method are included.

Data for the Netherlands, Portugal and Ireland for unemployed and inactive only.

Values indicated by a dash (-) are statistically unreliable.

Figure 6: PRES & PES Main Search Method
All Job-Seekers, 1992-94



Figure 7: PRES & PES Main Search Method
Unemployed, 1992-1994



Moreover, the reported rate of use of the PRES as "main search method" is very low in most countries so that the PRES can hardly be a major explanation for national differences in PES market share, except in Belgium and the Netherlands.

The principal reason for the lack of a trade-off is, however, that, even where PRES are restricted or prohibited, "other" search channels (advertisements, direct contact with employers, friends and acquaintances, through other employees etc.) are available to both jobseekers and employers. They, rather than the PRES, are the major alternative to the PES. In all countries most placements take place without any mediation by public or private intermediaries. For this reason even a prohibition of private placement services is not sufficient to secure a dominant position for the PES in search processes on the labour market. Its attractiveness as determined by the quality and range of its services will be of decisive importance in determining its market share. The importance of competition with PRES as a determinant of PES market share appears to be greatly exaggerated in policy debates about placement services.

3.2.3 Public employment service and private employment service clientele

A key question regarding the relationship between the PES and PRES pertains to the clientele they serve. Do the PRES largely "cream" the labour market, serving a clientele with markedly better labour market prospects (i.e. the employed rather than the unemployed, skilled rather than unskilled, mainstream workers rather than problem groups), or do they largely serve the same clientele as the PES?

As noted above, the issue of whether PES and PRES serve the same or different labour market segments is also important for assessing the extent to which they actually compete directly in providing labour market services.

The ELFS data can be used to analyze the characteristics of the clientele served by the PES and PRES in terms of a number of relevant characteristics such as gender, labour market status, duration of job search, occupation, industry, and age, and type of employment sought (full/part-time). For example, the clientele of the PRES "main users" shows a higher percentage of employed persons than does the PES in every country for which data are reported; this tendency is particularly strong in Denmark and the UK, which have the most developed PRES industries among the countries for which data are reported (Figure 8). Nevertheless, the majority of the PRES clientele is made up of the unemployed and inactive in every country for which data are available except in the UK (56.9% employed).

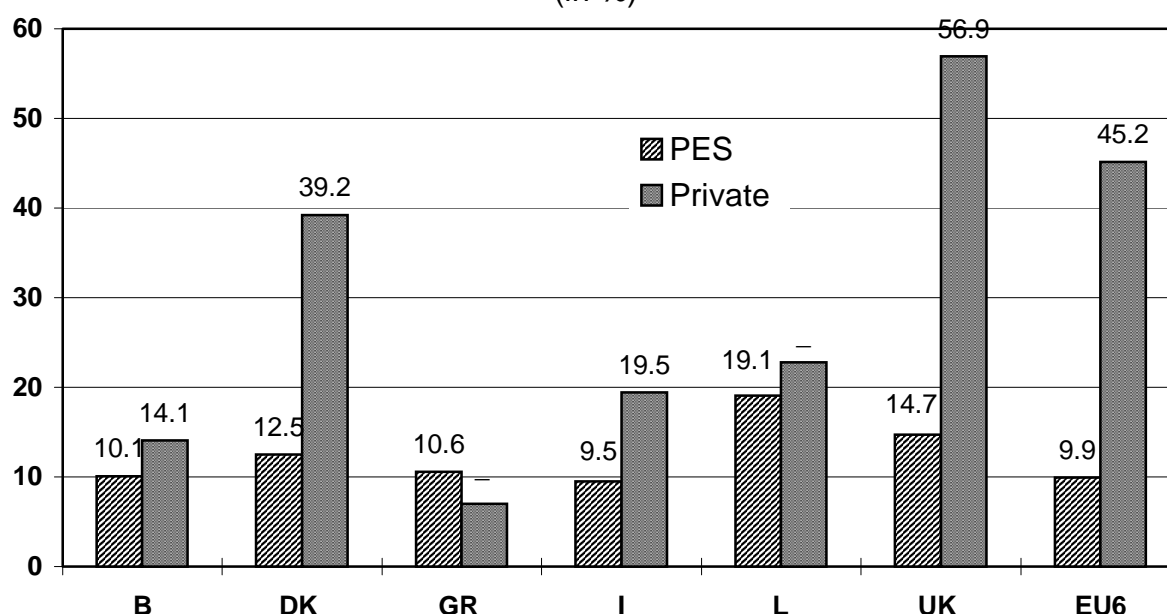
In the following discussion we focus our comparative analysis on the structure of the PRES clientele in comparison with that of all jobseekers as reported in the pooled 1989-91 data.²¹ The indices show the selectivity of the PRES (i.e., likelihood of using the PRES). The percentage share of the PRES clientele belonging to a given group is compared with that group's percentage share among all jobseekers. Thus a score of 1 indicates that the group is proportionately represented among PRES users, while a higher score indicates overrepresentation and a lower index value under representation.

Labour market status and gender

In Europe as a whole the inactive (1.13) and the unemployed (1.06) are somewhat over-represented and employed job seekers (0.87) under-represented among the PRES clientele in comparison with all jobseekers (Table 2). In fact the employed are underrepresented among the clientele

²¹ We use the earlier data series because of the problems discussed above regarding the data for Germany, France and Spain. Moreover, the earlier series has the advantage of defining PRES use less restrictively ("users" rather than "main search method").

Figure 8: PES and PRES-Clientele, Percent Employed, 1992-94
(in %)



Source: Eurostat European Labour Force Survey, own calculations

Only persons with at least one search method are included.
Data for the Netherlands, Portugal and Ireland for unemployed and inactive only.
Values indicated by a dash (-) are statistically unreliable.

of reported PRES users in all 11 EU member states for which data are available. This somewhat surprising result can be interpreted to mean that employed persons make less use of placement services, both public and private, because they are more likely to use other search channels, especially informal ones. The data tables also report the actual composition of the PRES clientele, the overwhelming majority of which are unemployed in every country.

A further breakdown by gender shows no consistent pattern, although there is a significant over representation of the employed among PRES users only among females in Spain and among males in Italy. By contrast use of the PRES is consistently more intensive among the unemployed, both male and female.

Occupational categories (ISCO)

Comparison of PRES users by occupational groups (ISCO) with all jobseekers shows different national patterns about which it is difficult to generalize. In Belgium both professional and technical employees as well as jobseekers with elementary occupations are over-represented; in Germany skilled blue collar workers and elementary occupations; in Denmark sales and service employees as well as skilled blue collar workers and elementary occupations; in Spain all categories of office workers, in France semi-skilled and unskilled blue-collar workers and elementary occupations, and in the UK skilled blue collar workers and elementary occupations (Table 3).

The PRES clientele is very heterogeneous and includes jobseekers with a broad range of skills; the most striking result is the over-representation of elementary occupations in all countries for which data are available except Spain. The PRES clientele defined in terms of occupations of reported users of this search method is not highly selective in comparison with all jobseekers as sometimes assumed.

Other characteristics

The age composition of users of the PRES in the EU as a whole shows a slight bias toward young workers 16-25 years of age (1.04) and toward workers over fifty years of age (1.07; Table 4). There are, however, very distinctive national patterns. In the Netherlands (1.47), France (1.28), the UK (1.24), and Belgium (1.17) there is a strong overrepresentation of youth among users of this search channel for whom job search through the PRES is apparently an important avenue of labour market entry. In Denmark (1.86), Greece (1.66), and Italy (1.31) older workers are strongly over-represented among users of this search channel for reasons that are not entirely clear.

Table 2: Index Use of PRES by Working-Status and Gender, 1989- 91

| INDEX | Employed | | Unemployed | | Inactive | |
|-------|----------|--------|------------|--------|----------|--------|
| | male | female | male | female | male | female |
| BE | 0.65 | 0.82 | 1.04 | 1.07 | 1.76 | 0.99 |
| DE | 1.00 | 0.96 | 1.07 | 1.01 | 0.82 | 0.90 |
| DK | - | - | 1.21 | 1.65 | 1.16 | 1.89 |
| ES | - | - | 0.91 | 1.06 | 0.00 | 2.37 |
| FR | 0.80 | 0.69 | 1.46 | 0.87 | 0.89 | 0.46 |
| GR | - | - | - | - | - | - |
| IR | 0.87 | 0.74 | 1.15 | 0.99 | - | - |
| IT | 1.10 | 0.69 | 1.08 | 1.00 | - | - |
| LX | - | - | - | - | - | - |
| NL | - | - | 1.16 | 0.94 | 0.84 | 0.66 |
| PO | - | - | - | - | - | - |
| UK | 0.59 | 0.59 | 1.51 | 1.10 | 1.10 | 0.71 |

| All Jobseekers | Employed | | Unemployed | | Inactive | |
|----------------|----------|--------|------------|--------|----------|--------|
| | male | female | male | female | male | female |
| BE | 9.15% | 12.89% | 28.86% | 44.03% | 1.83% | 3.24% |
| DE | 21.53% | 16.97% | 24.38% | 26.99% | 4.08% | 6.04% |
| DK | 15.34% | 16.97% | 28.76% | 30.59% | 3.13% | 5.21% |
| ES | 5.42% | 4.08% | 42.54% | 45.20% | 1.03% | 1.73% |
| FR | 14.02% | 14.36% | 29.94% | 37.97% | 1.18% | 2.53% |
| GR | 16.81% | 9.61% | 27.78% | 44.55% | 0.42% | 0.82% |
| IR | 12.30% | 7.41% | 48.47% | 26.74% | 2.32% | 2.76% |
| IT | 15.47% | 12.34% | 30.33% | 41.86% | 0.00% | 0.00% |
| LX | 33.13% | 19.13% | 20.49% | 22.29% | 2.86% | 2.11% |
| NL | 0.00% | 0.00% | 39.85% | 46.19% | 5.55% | 8.41% |
| PO | 12.70% | 13.97% | 28.44% | 42.64% | 0.94% | 1.31% |
| UK | 24.08% | 19.04% | 31.67% | 20.47% | 2.17% | 2.55% |

| PRES Users | Employed | | Unemployed | | Inactive | |
|------------|----------|--------|------------|--------|----------|--------|
| | male | female | male | female | male | female |
| BE | 5.90% | 10.60% | 30.01% | 47.08% | 3.21% | 3.20% |
| DE | 21.53% | 16.30% | 26.09% | 27.31% | 3.35% | 5.42% |
| DK | - | - | 34.76% | 50.60% | 3.63% | 9.83% |
| ES | - | - | 38.52% | 48.03% | 0.00% | 4.11% |
| FR | 11.17% | 9.85% | 43.84% | 32.93% | 1.05% | 1.15% |
| GR | - | - | - | - | - | - |
| IR | 10.65% | 5.48% | 55.63% | 26.38% | - | - |
| IT | 16.95% | 8.46% | 32.65% | 41.94% | - | - |
| LX | - | - | - | - | - | - |
| NL | - | - | 46.38% | 43.45% | 4.64% | 5.53% |
| PO | - | - | - | - | - | - |
| UK | 14.28% | 11.29% | 47.73% | 22.50% | 2.40% | 1.81% |

Source: Eurostat European Labour Force Survey. Notes: 1. The index of use is computed simply by dividing the proportion of the clientele of private employment services (PRES) in a group by that group's share among all job seekers; a value of 1 indicates that the share of PRES users in category is identical with its share among all the job-seekers. 2. Dash (-) indicates values that are statistically unreliable (too few cases).

Table 3: Index Use of Private Employment Service by ISCO, 1989 - 1991

| Index | BE | DE | DK | ES | FR | GR | UK | EU7 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Senior officials and managers | 0.75 | 0.91 | - | 1.55 | 0.16 | - | 0.41 | 0.96 |
| Professionals | - | 1.02 | - | - | - | - | 0.74 | 0.71 |
| Technicians and associate professionals | 1.26 | 0.87 | 0.81 | - | - | - | 0.91 | 1.33 |
| Clerks | 0.86 | 0.94 | 0.44 | - | 0.38 | - | 0.89 | 1.17 |
| Service workers and shop and market sales workers | 0.95 | 1.03 | 1.22 | 2.45 | 0.50 | - | 0.97 | 1.00 |
| Skilled agricultural workers | - | 1.43 | 1.13 | - | 0.66 | - | 1.21 | 0.98 |
| Craft and related trade workers | 0.91 | 1.16 | 1.19 | - | 0.92 | - | 1.05 | 0.51 |
| Plant and machine operators, assemblers | 0.96 | 0.99 | 0.75 | - | 1.36 | - | 0.85 | 1.08 |
| Elementary occupations | 1.34 | 1.10 | 1.14 | 1.03 | 1.28 | - | 1.09 | 1.18 |
| Not stated | - | 1.13 | | - | 1.28 | - | 0.61 | 1.19 |
| Total | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | - | 1.00 | 1.00 |
| All Job-Seekers (%) | BE | DE | DK | ES | FR | GR | UK | EU |
| Senior officials and managers | 4.87 | 5.36 | 4.47 | 1.62 | 2.18 | 3.85 | 4.37 | 44.05 |
| Professionals | 0.43 | 1.74 | 1.22 | 0.11 | 0.03 | 0.16 | 2.28 | 2.93 |
| Technicians and associate professionals | 10.53 | 11.48 | 12.59 | 5.28 | 6.32 | 5.97 | 11.55 | 0.90 |
| Clerks | 4.32 | 5.88 | 8.44 | 4.32 | 2.63 | 4.76 | 6.68 | 7.52 |
| Service workers and shop and market sales workers | 7.72 | 6.78 | 11.21 | 10.18 | 5.90 | 5.68 | 9.05 | 4.39 |
| Skilled agricultural workers | 0.37 | 1.81 | 2.02 | 9.31 | 0.68 | 5.67 | 1.07 | 7.14 |
| Craft and related trade workers | 3.46 | 3.67 | 5.46 | 3.77 | 1.33 | 5.30 | 2.94 | 2.80 |
| Plant and machine operators, assemblers | 4.14 | 7.89 | 6.37 | 3.97 | 2.70 | 4.45 | 6.45 | 2.68 |
| Elementary occupations | 8.29 | 10.82 | 21.72 | 13.70 | 4.30 | 9.89 | 11.98 | 4.44 |
| Not stated | 0.02 | 5.67 | 0.00 | 0.00 | 42.30 | 0.00 | 3.16 | 9.27 |
| Total | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| PRES Job-Seekers (%) | BE | DE | DK | ES | FR | GR | UK | EU |
| Senior officials and managers | 3.64 | 4.85 | - | - | 0.34 | - | 1.80 | 42.47 |
| Professionals | - | 1.78 | - | - | - | - | 1.69 | 2.08 |
| Technicians and associate professionals | 13.30 | 10.00 | 10.22 | - | - | - | 10.55 | 1.20 |
| Clerks | 3.72 | 5.54 | 3.73 | - | 1.00 | - | 5.92 | 8.82 |
| Service workers and shop and market sales workers | 7.31 | 7.00 | 13.70 | 24.92 | 2.93 | - | 8.75 | 4.41 |
| Skilled agricultural workers | - | 2.59 | 2.27 | - | 0.45 | - | 1.30 | 6.98 |
| Craft and related trade workers | 3.16 | 4.26 | 6.50 | - | 1.23 | - | 3.08 | 1.42 |
| Plant and machine operators, assemblers | 3.99 | 7.80 | 4.75 | - | 3.69 | - | 5.46 | 2.90 |
| Elementary occupations | 11.08 | 11.91 | 24.71 | 14.13 | 5.49 | - | 13.04 | 5.24 |
| Not stated | - | 6.44 | - | - | 54.18 | - | 1.92 | 11.03 |
| Total | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | - | 100.00 | 100.00 |

Source: Eurostat European Labour Force Survey; own calculations.

Notes: 1. ISCO = International Standard Classification of Occupations

2. The index of use is computed simply by dividing the proportion of the clientele of private employment services (PRES) in an ISCO-group by that ISCO-group's share among all job seekers; a value 1 shows that the share of PRES- users in an ISCO group is identical with its share among all the job-seekers.

3. No data available for the Netherlands, Portugal, Ireland, Italy and Luxembourg

4. Values written in italic are statistically somewhat unreliable

5. Values indicated with a dash "-" are statistically unreliable (too few cases).

Table 4: Index Use of Private Employment Service, by Age, 1989- 1991

| Index | B | D | DK | E | F | GR | IRL | I | L | NL | P | UK |
|-----------------------------|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------------|--------|--------|
| > 51 | <i>0.87</i> | 0.94 | - | 0.54 | 0.60 | - | 0.89 | 1.31 | - | 0.38 | 0.80 | 1.00 |
| 16-25 | 1.17 | 1.07 | 0.70 | 1.02 | 1.28 | - | 1.06 | 1.01 | - | <i>1.46</i> | 0.68 | 1.24 |
| 26-50 | 0.92 | 0.99 | 1.02 | 1.08 | 0.89 | - | 0.97 | 0.97 | - | <i>0.82</i> | 1.35 | 0.84 |
| Total | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | - | 1.00 | 1.00 | - | 1.00 | 1.00 | 1.00 |
| All Job- Seekers (%) | B | D | DK | E | F | GR | IRL | I | L | NL | P | UK |
| > 51 | 4.50 | 12.74 | 10.59 | 9.78 | 7.88 | 6.02 | 8.97 | 2.79 | 3.88 | 7.64 | 6.68 | 12.21 |
| 16-25 | 32.38 | 21.23 | 34.13 | 43.90 | 34.87 | 47.56 | 38.05 | 53.00 | 33.57 | 32.83 | 46.80 | 35.15 |
| 26-50 | 63.12 | 66.03 | 55.28 | 46.32 | 57.25 | 46.42 | 52.98 | 44.21 | 62.55 | 59.52 | 46.52 | 52.65 |
| Total | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| PRES Job- Seekers (%) | B | D | DK | E | F | GR | IRL | I | L | NL | P | UK |
| > 51 | <i>3.91</i> | 11.95 | - | 5.24 | 4.71 | - | 7.99 | 3.67 | - | 2.92 | 5.33 | 12.26 |
| 16-25 | 37.80 | 22.72 | 23.99 | 44.96 | 44.51 | - | 40.39 | 53.54 | - | <i>48.01</i> | 31.98 | 43.44 |
| 26-50 | 58.29 | 65.33 | 56.30 | 49.80 | 50.78 | - | 51.62 | 42.79 | - | <i>49.07</i> | 62.69 | 44.30 |
| Total | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | - | 100.00 | 100.00 | - | 100.00 | 100.00 | 100.00 |

Source: Eurostat, European Labour Force Survey; own calculations.

Notes: 1. The index of use is computed simply by dividing the proportion of the clientele of private employment services (PRES) in an age group by that age-group's share among all job seekers; a value 1 indicates that the share of PRES- users in an age group is identical with its share among all the job-seekers.

2. Values written in italics are statistically somewhat unreliable.

3. Values indicated with a dash (-) are statistically unreliable.

The sectoral pattern of use in the EU as a whole shows a slight bias toward persons with previous work experience in Industry (1.12), although national patterns diverge sometimes markedly. While in Denmark, France, Luxembourg, Portugal, Greece, and the Netherlands there is a moderate to strong overrepresentation of workers from the industrial sector, Spain shows a very strong concentration of the PRES clientele in the service sector.

Analysis of the PRES clientele in terms of the type of whether full-time or part-time employment is sought, shows no distinctive PRES orientation except for Spain where the PRES clientele is heavily weighted toward persons seeking part-time employment (Table 5).

The PRES is thus clearly important for the unemployed, youth, and other job entrants in many countries. This indicates a considerable overlap with the clientele of the PES and is markedly at odds with simple stereotypes about PRES users. Although the ELFS data do not distinguish between different types of PRES agencies, it is safe to assume that the clientele of temporary work agencies are numerically by far the largest group in each country and hence the principal determinant of these PRES patterns.

Trends

The ELFS data examined show no clear trend toward increased use of private placement services by jobseekers in the European Union as a whole in the late 1980s and early 1990s (see Figure 9).²² Germany and France show the highest rates of use over this period with reported rates of use of between 20% to 25%; only in France was there a marked secular increase in PRES, which occurred between 1983 and 1987. Spain and Italy - both PES monopoly countries - show markedly lower rates of PRES use, and the rank order of countries with respect to use of PRES is consistent over the entire period.

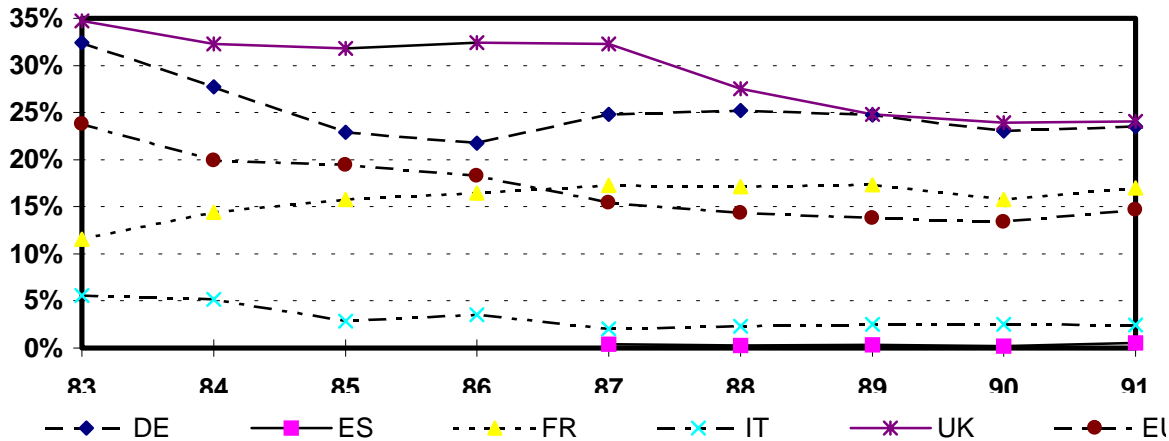
²² For other countries the annual data either contain too few cases to be statistically significant or the question was not asked of all job seekers.

Overlap in PRES and PES Clienteles

Individual jobseekers (as well as employers) use multiple search channels. This means that in practice the PRES - like other search channels - is frequently used in addition and not as an alternative to the PES.

Pooled ELFS results for 1989-91 shows that there is indeed a high degree of overlap between PES and PRES clienteles; most PRES jobseekers are also registered with the PE (Figure 10).²³ The reported percentage is highest in Denmark, where almost all PRES users are also registered with the PES, and lowest in Germany, where only about 50% of PRES users are also registered with the PES. An even higher percentage of unemployed PRES users are also PES registered. While institutional co-operation between PRES and PES appears to be very limited (Walwei 1996a), jobseekers clearly combine both types of search channels.

Figure 9: Use of Private Employment Services (PRES) in Selected EU States, All Job Seekers 1983-1991



Source: Eurostat European Labour Force Survey, own calculations. Only persons with at least one search method are included. Data for the Netherlands, Portugal and Ireland for unemployed and inactive only.

²³ The pre-1992 data series is used here to avoid the coding problems for Germany, France, and Spain noted above.

Table 5: Index Use of PRES by Working-time preference

| | Index PRES Pref. Full-time | Index PRES Pref. Part-time |
|---------|----------------------------|----------------------------|
| BE | 1.00 | 0.99 |
| DE | 0.98 | 1.09 |
| DK | 1.04 | 0.75 |
| ES | 0.73 | 5.10 |
| FR | 1.06 | 0.47 |
| GR * | 0.97 | 1.49 |
| IR ** | 1.06 | 0.60 |
| IT | 0.97 | 1.19 |
| LX * | 1.14 | 0.00 |
| NL ** | 1.24 | 0.73 |
| PO */** | 1.05 | - |
| UK | 1.12 | 0.57 |
| EU 12 | 1.01 | 0.93 |

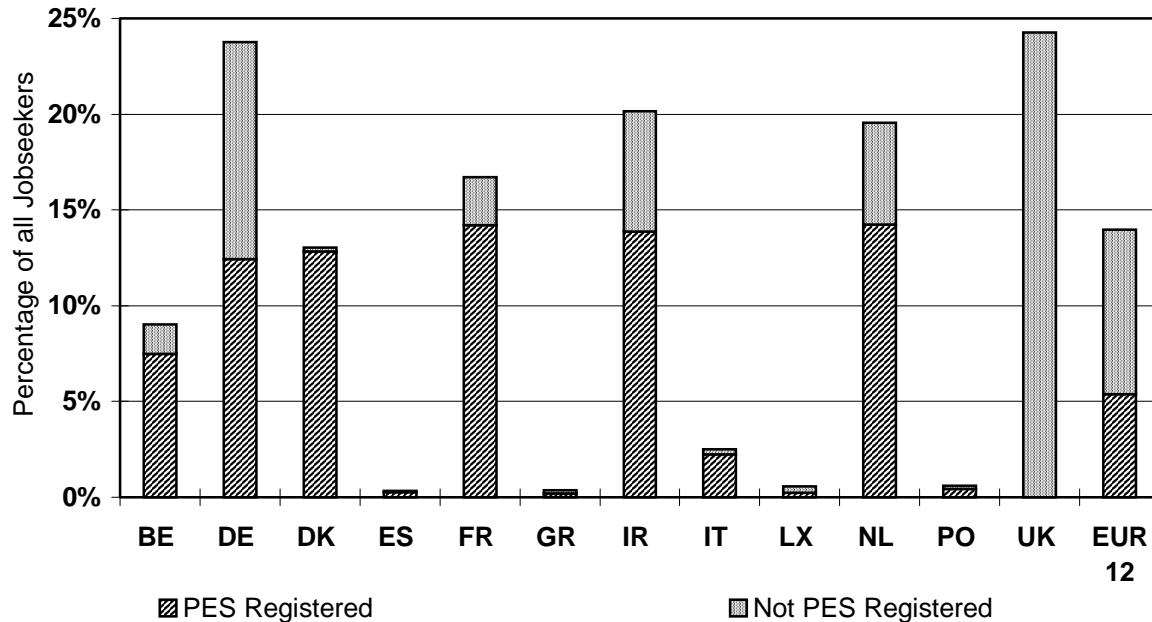
| | PRES Pref. Full-time | PRES Pref. Part-time |
|---------|----------------------|----------------------|
| BE | 87.82% | 12.18% |
| DE | 77.10% | 22.90% |
| DK | 90.64% | 9.36% |
| ES | 69.02% | 30.98% |
| FR | 95.13% | 4.87% |
| GR * | 91.00% | 9.00% |
| IR ** | 92.73% | 7.27% |
| IT | 85.00% | 15.00% |
| LX * | 100.00% | 0.00% |
| NL ** | 65.22% | 34.78% |
| PO */** | 98.76% | 1.24% |
| UK | 87.20% | 12.80% |
| EU 12 | 85.71% | 14.29% |

| | All Job Seekers: Pref. Full-time | All Job Seekers: Pref. Part-time |
|---------|----------------------------------|----------------------------------|
| BE | 87.71% | 12.29% |
| DE | 78.99% | 21.01% |
| DK | 87.55% | 12.45% |
| ES | 93.92% | 6.08% |
| FR | 89.55% | 10.45% |
| GR * | 93.97% | 6.03% |
| IR ** | 87.83% | 12.17% |
| IT | 87.43% | 12.57% |
| LX * | 87.49% | 12.51% |
| NL ** | 52.40% | 47.60% |
| PO */** | 94.39% | - |
| UK | 77.68% | 22.32% |
| EU 12 | 84.60% | 15.40% |

Source: Eurostat European Labour Force Survey; own calculations

Notes: 1. "*" = Statistically unreliable (too few cases). "***" = unemployed only. 2. The index of use is computed simply by dividing the proportion of the clientele of private employment services (PRES) in a group by that group's share among all job seekers; a value 1 indicates that the share of PRES- users in a group is identical with its share among all the job-seekers. 3. Values indicated with a dash are statistically unreliable.

Figure 10: PRES Users Registered with PES, All Job-Seekers, 1989- 91



Source: Eurostat European Labour Force Survey, own calculations

Only persons with at least one search method are included.

Data for the Netherlands, Portugal and Ireland for unemployed and inactive only.

4 Market Share and Market Segment of the German Employment Service: Evidence from the German Socio-Economic Panel

In this chapter our primary focus is on the PES clientele.²⁴ The likelihood of placement through the PES is examined with respect to a number of supply-side and demand-side characteristics in several multivariate logit models. Section 5.1 formulates a number of hypotheses regarding char-

²⁴ This focus is dictated by the limitations of the data set, which contains no information on, for example, the number of search channels used and their effectiveness in generating job contacts or job offers. We have information only on the search channel that led to placement in a new employment relationship.

acteristics of jobseekers and jobs likely to be associated with market failure and resort to the PES as a search channel; section 5.2 describes the data set used on transitions to employment in Germany drawn from the German Socio-Economic Panel; section 5.3 reports descriptive results on the market share of the PES disaggregated by a number of labour market segments; section 5.4 reports multivariate logistic regression results on the determinants of job finding through the PES in Germany; section 6 draws some preliminary conclusions.

4.1 Determinants of individual placement through the public employment service

In the following discussion we draw on three relatively distinct theoretical strands in order to formulate a number of hypotheses regarding characteristics of the PES's clientele: 1) human capital characteristics of jobseekers and access to alternative search channels; 2) theories of labour market segmentation; 3) normative and policy definitions of the role of the PES in compensating market failure.

Mediation of placements by the PES presupposes at least that the employer has notified a vacancy to the PES and that the successful applicant was referred by the PES or at least learned of the vacancy through it (e.g., PES open information services).

4.1.1 Human capital characteristics and alternative search channels

There have been relatively few studies in the literature on job search behaviour on the use of different search channels and search intensity, and how they vary with the characteristics of jobseekers. Job search models in labour economics extend neo-classical theory by incorporating issues of uncertainty and information: The individual job seeker determines a reservation wage, i.e. the wage that equates the marginal costs and expected marginal benefits of continued search, based on general knowledge of wage distribution and accepts the first offer that exceeding the reservation wage (Devine and Kiefer 1991).

This type of model points towards potentially important functions of the PES in providing regional wage information as a public good and in effective counselling of jobseekers, who frequently have unrealistic wage expectations. It is also the basis for a large literature on the impact of unemployment benefits on job search behaviour (Atkinson and Micklewright 1991). This supply side approach, however, focuses on job acceptance rather than job search, (Dijk, Goede, Ophem 1995).

A number of more recent empirical studies in labour economics have begun to fill this gap by examining search channels, search intensity, the number and sequence of channels used, and success rates in different countries (e.g. Bortnick and Ports 1992; Lindboom and Ours 1996; Russo et al. 1996; Toharia 1996; Holzer 1988). Mosley (1997) compares the importance of different individual search channels in different labour market segments cross nationally on the basis of labour force survey data for 12 EU member states.

In general these studies show that a variety of formal and informal search channels are available to both jobseekers and employers. Job search behaviour and the probability of finding employment through a particular search channel vary significantly according to labour market status and human capital endowments (schooling and qualifications). There is some evidence that informal search channels may be generally superior to formal ones in terms of number of job offers generated and accepted (Holzer 1988) and that jobseekers may attain higher wages through informal rather than formal search channels like the PES (Mortensen and Vishwanath 1994).

Insiders vs. outsiders

In general we hypothesize that insiders, i.e. the employed, dispose over richer informal contacts and information sources than is the case for the unemployed or those entering (new entrants) or re-entering (re-entrants) the labour market and the latter are, therefore, more likely to seek and

find employment through the PES (Lindeboom and Ours 1996; Mosley 1997). The data set does not currently distinguish the unemployed from other persons re-entering employment after a period of inactivity; this will be rectified in a subsequent version.

For similar reasons we would expect youth entering the labour market (<20 age) and those seeking apprenticeship positions to rely more on formal channels, including the PES in searching for and finding employment.

Human capital

Both the human capital endowments for individuals and the skill requirements of jobs influence choice of search channels and likelihood of PES placement. Jobseekers with high human capital endowments can be expected to search more intensively, and use multiple methods due to their greater capacity for 'self-help' and the higher opportunity costs of unemployment (Toharia 1996; Dijk, Goede, and Ophem 1995). Professionals in particular are likely to have superior informal search channels through professional contacts and to have access to specialized search information in regional and national labour markets (e.g. through professional associations, specialized publications etc.). The same arguments are also applicable (if less strongly) to other occupational labour markets for qualified employees. By contrast we would expect lower skilled and unskilled workers outside occupational labour markets to have *ceteris paribus* less access to superior informal or alternative occupational search channels.

In the current version we have used schooling as an indicator for human capital; in a subsequent version schooling will be combined with vocational and professional training.

Labour market conditions

PES market share to be lower in economic downturn. In loose labour markets employers find suitable applicants more easily by informal methods, whereas in tight labour markets they will be more likely to use multiple

channels including the PES (Russo et al 1996.). PES resources are relatively inelastic and this search channel tends to be "clogged" during a recession because of the high influx of unemployed jobseekers to the PES its responsibilities for administering unemployment benefits.²⁵ We use a dummy variable for the recession years 1992-1993. We also analyze data for the West and East German regions separately inter alia for this reason.

4.1.2 Labour market segmentation

The segmented labour market approach argues that labour market outcomes such as employment and earnings cannot be explained by individual qualifications alone but are to a large extent the result of patterns of labour market segmentation. Thus Doeringer and Piore (1971) distinguish classically between "good jobs" in the high-wage primary sector and "bad jobs" in the secondary sector. The German reception of this approach has emphasized the importance of skill differences in patterns of segmentation even within the same firm (Lutz and Sengenberger 1974) and the importance of differences in firm size (Blossfeld and Mayer 1987). Small firms usually include a secondary labour market segment of semi-skilled and unskilled workers and a segment with skilled occupational qualifications. By contrast large firms have in addition to unskilled 'general workers' a core workforce segment that is characterized by a high degree of firm-specific qualifications. In contrast to the occupational and general workers segments, these skills are not available on the external labour market but are the product of a longer personnel development within the internal labour market of the firm. This approach has a number of implications for patterns of recruitment and hence the likelihood of placements taking place through the mediation of the PES. We have extended it by distin-

²⁵ Lindeboom and van Ours (1996) point out the possibility that search channels may become clogged.

guishing a third category of professionals with higher education for whom recruitment patterns are distinctive (see below).

Firm size

Large firms are more likely to rely on search channels other than the PES. They have well developed internal labour markets and recruit largely through entry level positions, frequently through apprenticeship training for intermediate level skills. Their local or even regional prominence assures them a higher level of unsolicited job applications, which are also attracted by higher pay and greater job security. They have a large penumbra of informal recruitment channels through their own employees and suppliers ("extended internal labour market"). They have their own professional personnel departments and hence less need to use external placement services.

Skill requirements of job

Many of the same considerations discussed above for individual human capital are also applicable to search channels on the demand side. For professional and skilled employees, employers are willing to invest considerable resources in identifying and recruiting suitable candidates (e.g. through direct advertising or private agencies) in contrast to less skilled and unskilled positions, for which the likelihood of recruiting through the PES is greater. There are frequently specialized recruitment channels in occupational and especially professional labour markets. These three job characteristics interact as illustrated in the following figure:

Labour market segments

| | Firm size | |
|--------------------------------|--|-----------------|
| | SME (small/medium sized <200) | Large (>200) |
| | | |
| | | |
| | | |
| Skill require- ments of job | Professional (University, Polytechnic or comparable) | |
| | Skilled (Apprenticeship) | |
| | Unskilled, semi-skilled | |

Full-time vs.- part-time and casual employment

We think that vacancies for part-time and especially marginal part-time work (<15 hours) are more likely to be filled through informal channels rather through the employment service. PT jobs are less stable, frequently lower-paid with lower skill requirements and likely to be filled locally. Earnings are typically below the reservation wage for unemployed benefit recipients.

4.1.3 Market failure and clientele characteristics

As discussed above (3.3), critics of market share as a criterion of PES performance point out that most jobseekers find employment through other channels without any assistance from the PES and urge that the PES focus its resources on the long-term unemployed and other problem groups (de Koning 1997). From a market failure perspective an important justification of public intervention is that it serves the equity needs of labour market participants who cannot be served by private employment agencies and who might otherwise drop out of the labour market (Walwei

1996b). From this policy perspective, which is consistent with the human capital and labour market segmentation hypotheses discussed above, the key criteria are whether the PES serves labour market outsiders and especially target groups such as older workers (>45), the unskilled, the long-term unemployed,²⁶ as well as small firms on the demand side.

4.2 The German Socio-Economic Panel employment transitions data set

The German Socio-Economic Panel (GSOEP) is a longitudinal panel with annual interviews conducted since 1984. Eleven waves of interviews are now available for West Germany and five for East Germany (since 1989). The current sample includes ca. 12,000 individuals. Although not a specialized labour market panel, various questions in the GSOEP provide information on whether individuals are registered with the PES, whether they have taken up new employment in past year, and whether they learned of the opening through the PES or other job search channels. In combination with other GSOEP variables, it is then possible to get a good picture of the importance of PES mediation in the labour market and the characteristics of jobseekers who are successful in finding employment through the PES. Other questions provide information of the characteristics of the jobs found through the PES.

The principal shortcoming of the data set is that not all jobseekers but only job-finders are asked about their successful search method, so it is not possible to compare the job search outcomes of PES users and non-users. Since individual data are available, it is possible to examine determinants of PES placements and PES clientele using multivariate techniques to test a number of hypotheses about the PES and those who find employment through it.

²⁶ Long-term unemployment as an indicator for target group orientation is not available in this version of the analysis but will be added subsequently.

The PES data set comprises 7391 transitions into new employment relationships from all labour market status groups (inactivity, unemployment, employment) drawn from GSOEP waves 2 to 11 for the years 1984 to 1993, for both East and West Germany. The data set also includes persons finding apprenticeship positions as well as those entering self-employment. No distinction is made between transitions to regular and subsidized employment (e.g. job creation schemes).²⁷ Only transitions in which there is no change of employer (i.e. job changes within the same enterprise) are excluded. Moreover, only the most recent employment transition can be documented if an individual has started more than one job within a given year. Thus employment transitions into temporary jobs are underestimated for individuals with multiple employment spells within a given year.²⁸ Finally, because the data set is based on events (transitions to employment) rather than individuals, the same individual may be included more than once. Because the data set pools job changes over several years, no serious bias is expected.

A major limitation of the data set is the relatively low number of cases in a given year for users of the PES and participation in active measures. For this reason the GSEOP has been mostly used for analysis of ALMP impacts (training, short-time work) in Eastern Germany, where the number of participants in these programs has been particularly high. We have circumvented this problem by pooling the results for a large number of years. The principal shortcoming of pooling is the absence of a time dimension in the data (e.g. trends and cyclical effects), which can be com-

²⁷ A subsequent version of the paper will make this distinction for East Germany, where such transitions are particularly important.

²⁸ Because the data set pools job changes over several years, no serious bias is expected.

pensated in part by the use of a dummy variables for the recession years 1992-93 in West Germany.²⁹

4.3 Public employment service market share and market segment: descriptive findings

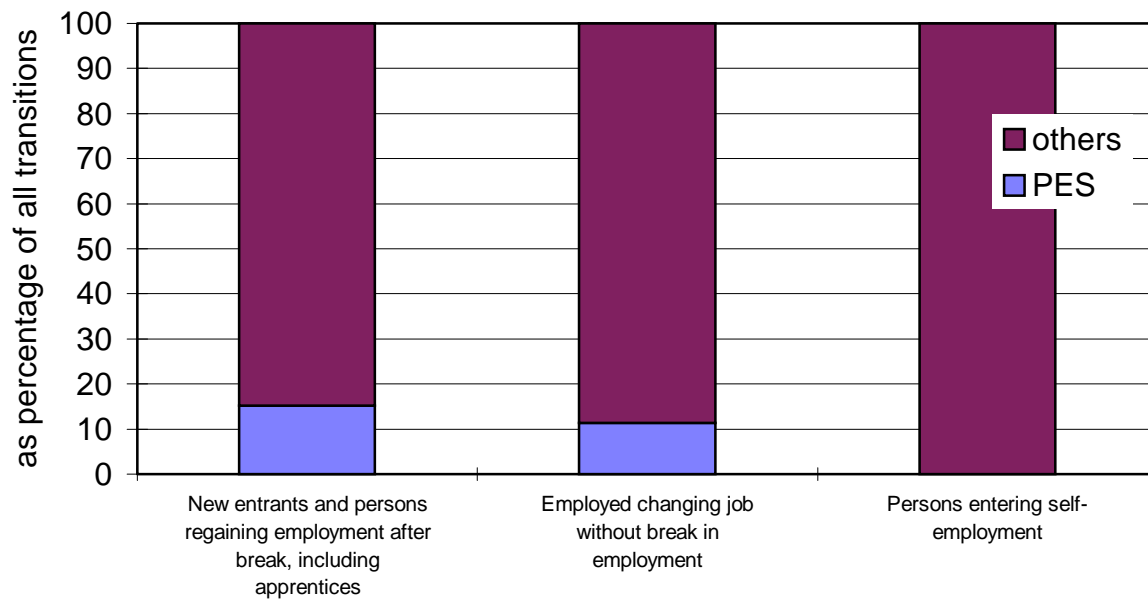
This section summarizes and comments on the principal descriptive findings. After a brief description of the results for the entire PES event data set, detailed findings are discussed for persons in dependent employment, i.e. excluding those entering self-employment and apprenticeship positions

The market share of the PES in all transitions to employment is relatively low. Among the 7391 employment transitions in 11 GSOEP waves from 1984 to 1993 only in 10, 6 % (n = 786) does the placement result from information provided by the PES, whereas in 76, 4 % (n = 5645) it is through other search channels. In 13 % (n = 960) of the cases no information was available on the successful search channel (Figure 11).

These figures represent merely the PES market share in the data set not yet estimated for the entire population. For a number of reasons the data set can be expected to overstate the PES market share: 1) Non-citizens and residents of East Germany, two groups in which the PES market share is particularly high, are over represented in the sample. 2) For persons with more than one job start in a given year, only the most recent event is included in the data set; thus precarious and casual employment transitions, in which the PES is certainly low, are underrepresented. 3) Illegal employment presumably remains unreported.

²⁹ Pooling data over several years also limits the analysis to variables that are available for all years.

Figure 11: Market Share of PES in Placements, by Type of Transition



Source: German Socio-economic Panel, Waves 2- 11, own calculations.

There is considerable variation in PES market share according to the labour market segments. The PES plays a very important role in the special labour market for apprenticeship positions, where its market share of 23.5% is almost double that for all employment transitions. Among other labour market segments the PES is strongest among blue collar workers (13.2%) . By contrast the PES plays almost no role in employment transitions for those entering self-employment and civil service (Beamte) employment (Table 6).

Table 6: Market Share of the PES in Placements by Type of Employment Found

| row percent- ages | Blue Collar. | Self- employment | Appren- ticeship, trainee | White Collar. | Civil Ser- vant. | |
|------------------------------|-------------------------|-----------------------------|--|--------------------------|-----------------------------|------|
| column per- centages. | | | | | | |
| Placement via PES | 38,9 | 0,0 | 29,7 | 30,9 | (0,4) | 100 |
| | 13,2 | 0,0 | 23,5 | 10,6 | (1,6) | 753 |
| Other | 37,2 | 7,0 | 14,1 | 38,2 | 3,5 | 100 |
| | 86,8 | 100,0 | 76,5 | 89,4 | 98,4 | 5176 |
| N= | 2221 | 362 | 953 | 2208 | 185 | 5929 |

Source: GSOEP Waves 2- 11, own calculations; Values in parenthesis: $N \leq 30$.

Whereas for new entrants and individuals taking up employment again after a career break the PES market share is 15% (transitions from unemployment or inactivity to employment), it is ca. 11% for job changers (employment to employment) and negligible for individuals entering self-employment (see Figure 11).

Transitions into dependent employment: Regional and demographic patterns

The PES market share is significantly higher in East Germany (14.9%) than in West Germany (9.6%: see Table 7). The reasons for the higher market of the PES in East Germany are not entirely clear. Data from employer surveys show that there are markedly different recruitment patterns in East and West Germany, of which the higher market share of the PES is only one element. In general advertising is much more important as a recruitment channel in the West, whereas the PES and informal channels (information from current employees, direct applications) are much more important in the East (IAB 1995). This may be a reflection of the abnormally high level of unemployment in the East. Moreover, under the special circumstances of the transformation crisis, there may be less stigma at-

tached to hiring the unemployed. Another factor is undoubtedly that the high level of subsidized employment in the East gives the PES more leverage in job-matching.³⁰ Whereas men are slightly more likely to find employment through the PES in West Germany (10.1%:9%), the PES is somewhat more important for women in the East (16.2%:13.9%).

**Table 7. PES Placements and Other Placements by Age
Western Germany**

| | under 20 | 20-25 | 25-30 | 30-35 | 35-40 | 40-50 | 50-60 | > 60 | N Row Total |
|---------------------------------|---------------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|----------------------------|
| PES | 72 | 99 | 58 | 43 | 33 | 39 | 26 | | 370 |
| Row % | 19.5 | 26.8 | 15.7 | 11.6 | 8.9 | 10.5 | 7.0 | | 9.6 |
| Col. % | <u>13.4</u> | <u>9.7</u> | <u>7.1</u> | <u>8.4</u> | <u>8.5</u> | <u>9.0</u> | <u>18.7</u> | | |
| Total % | 1.9 | 2.6 | 1.5 | 1.1 | .9 | 1.0 | .7 | | |
| Others | 458 | 898 | 746 | 451 | 345 | 378 | 105 | 7 | 3388 |
| Row % | 13.5 | 26.5 | 22.0 | 13.3 | 10.2 | 11.2 | 3.1 | 0.2 | 87.8 |
| Col. % | <u>85.3</u> | <u>87.6</u> | <u>91.1</u> | <u>88.4</u> | <u>88.7</u> | <u>87.7</u> | <u>75.5</u> | 100.0 | |
| Total % | 11.9 | 23.3 | 19.3 | 11.7 | 8.9 | 9.8 | 2.7 | 0.2 | |
| N Column Total % | 537 | 1025 | 819 | 510 | 389 | 431 | 139 | 7 | 3857 |
| | 1.9 | 26.6 | 21.2 | 13.2 | 10.1 | 11.2 | 3.6 | 0.2 | 100.0 |

Number of Missing Observations: 593

Source: GSOEP, Waves 2- 11, own calculations.

³⁰ The data set on employment transitions does not distinguish between jobs in the open economy and subsidized employment. According to OECD estimates, all program entrants in East Germany are at a rate of ca. 60% of all transitions out of unemployment (OECD 1996).

**Table 7 (cont.): PES Placements and Other Placements by Age
Eastern Germany**

| | under 20 | 20-25 | 25-30 | 30-35 | 35-40 | 40-50 | 50-60 | > 60 | <i>N</i> Row Total |
|--|---------------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|-----------------------------------|
| PES | 10 | 25 | 39 | 25 | 24 | 1.00 | 23 | | 192 |
| Row % | 5.2 | 13.0 | 20.3 | 13.0 | 12.5 | 24.0 | 12.0 | | 14.9 |
| Col. % | <u>11.6</u> | <u>15.7</u> | <u>16.3</u> | <u>11.4</u> | <u>13.1</u> | <u>16.5</u> | <u>19.2</u> | | |
| Total % | .8 | 1.9 | 3.0 | 1.9 | 1.9 | 3.6 | 1.8 | | |
| Others | 76 | 134 | 201 | 194 | 159 | 232 | 97 | 3 | 1096 |
| Row % | 6.9 | 12.2 | 18.3 | 17.7 | 14.5 | 21.2 | 8.9 | .3 | 85.1 |
| Col. % | <u>88.4</u> | <u>84.3</u> | <u>83.8</u> | <u>88.6</u> | <u>86.9</u> | <u>83.5</u> | <u>80.8</u> | <u>100.0</u> | |
| Total % | 5.9 | 10.4 | 15.6 | 15.1 | 12.3 | 18.0 | 7.5 | .2 | |
| <i>N</i> Column Total % | 86 | 159 | 240 | 219 | 183 | 278 | 120 | 3 | 1288 |
| | 6.7 | 12.3 | 18.6 | 17.0 | 14.2 | 21.6 | 9.3 | .2 | 100.0 |

Number of Missing Observations: 36

Source: GSOEP, Waves 9- 11, own calculations.

In both West (18.7%) and East (19.2%) the market share of the PES in placements is higher for older workers (Table 7). In the case of younger workers the regions exhibit somewhat different patterns. In the West youth under 20 (13.4%) show the second highest value. By contrast in the East the PES market share for younger workers peaks among the 25 to 30 year old age group (16.5%). For both regions these data do not include apprentices; their inclusion would yield a U-shaped pattern in which the highest market shares by age are found among the youngest (<20) and among older (>50) workers in both East and West.

The PES market share is greater for foreigners than for German citizens among both men (13%:8.7%) and women (12.3%:8.1%). These patterns by age and ethnicity suggest that problem groups do benefit disproportionately from PES placement services, although the PES's problem-group orientation is relatively weak and its overall market share is low.

4.4 Logistic regression results

4.4.1 Methodological remarks

In this section we examine the determinants of PES placements using multivariate logistic regressions in which the hypotheses discussed above (3.) are operationalized in terms of relevant variables from the GSOEP. Table 8 summarizes these results, which are presented separately for (1) all job-finders in Western Germany (German national and foreigners), (2) for German nationals and (3) foreigners (in the West), (4) for Eastern Germany; models 1 to 4 exclude apprentices and those entering self-employment.

Before discussing the principal results this methodology is briefly discussed: The logistic regression analyses the change in the probability of an event taking place (in this case placement via the PES) in comparison with the probability of it not taking place (i.e. placement through other search channels). These probabilities are expected to be a function of the different complexes of variables discussed in section 2 so that we can transform our basic model from

$$\beta_0 + \sum \beta_k X_k \rightarrow \begin{matrix} 1 \\ 0 \end{matrix} A_i \quad (1)$$

where $A = 1$ describes a placement via the PES; $A = 0$ an other placement and $\sum \beta_k X_k$ the independent variables

into a model that analyses the changes in the probability P , that $A = 1$

$$P_k = E (A = 1 / X_k) = \beta_0 + \beta_k X_k \quad (2)$$

Since the probability $A = 0$ can be seen as an inverse function of the probability $A = 1$, we find

$$P'_k = E (A = 0 / X_k) = 1 - P_k \quad (3)$$

Now $P_k / (1 - P_k)$ is simply the odds ratio in favour of having a placement via the PES –the ratio of the probability of a person finding a job through the PES to that of not finding a job through the PES.

The change in the logarithm of the odds ratio is the basis of the logistic regression analysis and can be written as the dependent variable in a linear equation. Therefore, we arrive at a function which is linear in its parameters and shows us which variables are important as determinants of $A = 1$, i.e. finding a job through the PES. The different variables types of variables, personal and job characteristics, as well as the variable indicating the economic downturn 1992 - 93, can be compared in this way, which is the aim of the following analysis.

Like in OLS regressions, statistical significance is checked with t and P tests. Additionally, the standardized beta-values allow us to compare the different independent variables directly.

The significance of the overall model can be tested against the null-hypothesis that the given independent variables have no effects on a PES placement at all. Analogous to OLS regressions, it is also possible in logit estimations to express the explanatory power of the model as a whole with the so-called Pseudo- R^2 , i.e. 1 minus the ratio of the log-likelihood of the estimation over the log-likelihood of the null-hypothesis, (i.e. a model with a constant but without the model explanatory variables). This Pseudo- R^2 is not directly comparable with the regression coefficient R^2 in OLS; in logistic regression a pseudo- R^2 around .2 is already quite good (Costanzo 1982, Urban 1993, Gujarati 1995).

4.4.2 Human capital characteristics and alternative search channels

Outsiders (i.e. persons entering or re-entering employment after unemployment or inactivity) are somewhat more likely to be placed through the PES in Western Germany (reference group: employed job-finders), although not among foreigners examined separately. The coefficient for youth also positively significant but only for the former FRG and not for individual subgroups (Table 8, models 2 & 3).

In the East the coefficient is actually negative, although not significant. This surprising result may reflect the fact that PES efforts in the East have

been heavily focused on assisting displaced workers, who in many cases had nominal employment relationships (e.g. structural short-time work) or subsidized employment.

The PES market share is lower in recession years as expected. The dummy variable for 1992-1993 is significantly negatively related to placement through the PES in West Germany, although not for foreigners. In East Germany, where the economic cycle diverged markedly from that in the West, this dummy is significantly positive.

Although the human capital variables (schooling) show - with one exception -- the expected positive signs for lower educational qualifications (reference group: Abitur), they are only significant for school dropouts in model 1 and in this case only at the 10% level.

Gender alone (female) is not significant in any of these models, which control for other personal and job characteristics.

4.4.3 Labour market segmentation

As anticipated, the PES is particularly active in placements of into unskilled and skilled positions in small firms (reference group skilled workers in large firms). However, it also places unskilled German workers in larger firms at about the same frequency, which is inconsistent with our hypothesis.³¹ These labour market segment variables are consistently significant only in West Germany but not in East Germany.

In West Germany PES recruitment is negatively related to marginal (<15 hours) part-time work but not to regular (15-35 hours) part-time work (reference group: full-time jobs). Among foreigners separately the working time coefficients are not significant.

³¹ This may be attributable to the fact that the definition of larger firms (>200 employees) is somewhat arbitrary. A subsequent version of the paper will use more differentiated size categories.

By contrast PES placements are particularly likely to be into regular part-time work (15-35 hours). This may reflect the high level of placements into the service sector (in the East PES placements are negatively related to industrial employment) as well as the importance of part-time job creation measures.

Employment status (white collar/blue collar/civil servant) is significant only in East Germany where PES placements are more likely to be into blue collar employment. PES placements show no significant sectoral pattern, except for the negative relationship to industrial employment noted above for East Germany.

4.4.4 The market failure rationale for the public employment service

Policy definitions of the role of the PES in compensating market failure emphasize in particular the role of the PES in placing labour market problem groups such as older workers, the unskilled, the long-term unemployed, as well as in filling difficult-to-fill vacancies in small firms, e.g., for skilled workers.

The data on employment transitions examined indicate that there is some target group orientation to PES placements but that this trend is neither strong nor consistent across the four subgroup models. PES placement is almost always positively related to lower educational qualifications (reference group: Abitur), but only the coefficient for school dropouts in West Germany is significant (and merely at 10% level). For West Germany older jobseekers (>45) are significantly more likely to find employment through the PES in comparison with the reference group of prime age workers (age 20 to 44), especially among foreigners. In East Germany the coefficient for age is not significant and the sign is actually negative.

We thus find little support for the proposition that PES activities are focused on labour market problem groups such as individuals with lower level of schooling and older workers as implied by the market failure rationale for the PES.

Placements in small firms, especially in skilled jobs, are significantly more likely to be PES placements, although this target conflicts with an orientation toward assistance for individuals with low human capital endowments on the supply side.

4.4.5 Public employment service placement of apprentices

PES placements into apprentices show only a weak tendency toward assistance to disadvantaged groups. Youth with lower educational qualifications are more likely to be placed through the PES (reference group: Abitur), but the coefficient is significant only for those completing Realschule and not for dropouts or for those completing the lowest educational track (Hauptschule). PES placements into apprenticeships are particularly important for East German youth; the coefficient for foreigners in the West is positive but not significant.

**Table 8: Logistic Regression Results on Placement through the PES
PES Jobfinders = 1**

| Model 1: Former FRG, All (including foreigners but without self-employed & apprentices) | | | | Model 2: Former FRG, German nationals (without foreigners, self-employed, apprentices) | | | |
|---|--------------------------|--------|--------|--|------------|--------|--------|
| Variable | B | S.E. | Exp(B) | Variable | B | S.E. | Exp(B) |
| SEX | -0.1131 | 0.1542 | 0.893 | SEX | -0.1124 | 0.1944 | 0.8937 |
| AGE45 | 0.5981*** | 0.1946 | 1.8187 | AGE45 | 0.2948 | 0.2714 | 1.3429 |
| YOUTH | 0.3306** | 0.1688 | 1.3919 | YOUTH | 0.3341 | 0.2215 | 1.3966 |
| Hauptschule | 0.1863 | 0.2493 | 1.2048 | Hauptschule | 0.212 | 0.2811 | 1.2361 |
| Realschule | 0.2437 | 0.2479 | 1.276 | Realschule | 0.2463 | 0.2848 | 1.2793 |
| Dropout | 0.546* | 0.3067 | 1.7264 | Dropout | 0.5634 | 0.4326 | 1.7566 |
| Outsider | 0.318** | 0.1387 | 1.3744 | Outsider | 0.3929** | 0.1744 | 1.4813 |
| Arbeiter | 0.0342 | 0.1741 | 1.0348 | Arbeiter | -0.0106 | 0.211 | 0.9894 |
| Beamte | -0.9453 | 0.743 | 0.3886 | Beamte | -0.7832 | 0.7521 | 0.457 |
| Agriculture | 0.5605 | 0.4865 | 1.7515 | Agriculture | 0.36 | 0.6691 | 1.4334 |
| Industry | -0.0449 | 0.1478 | 0.9561 | Industry | -0.0154 | 0.1832 | 0.9847 |
| PT-Marginal | -1.4705*** | 0.5266 | 0.2298 | PT-Marginal | -1.4705** | 0.611 | 0.2298 |
| PT-Regular | 0.0376 | 0.1894 | 1.0384 | PT-Regular | 0.169 | 0.2231 | 1.1842 |
| SEGMENT1 | 0.3282 | 0.2314 | 1.3884 | SEGMENT1 | 0.6853** | 0.2812 | 1.9844 |
| SEGMENT2 | 0.6097*** | 0.2049 | 1.84 | SEGMENT2 | 0.6025** | 0.2419 | 1.8267 |
| SEGMENT3 | -0.7609 | 0.7624 | 0.4673 | SEGMENT3 | -1.2374 | 1.0481 | 0.2902 |
| SEGMENT4 | 0.3437 | 0.2411 | 1.4101 | SEGMENT4 | 0.5987** | 0.2953 | 1.8197 |
| SEGMENT6 | -1.2387 | 0.7568 | 0.2898 | SEGMENT6 | -1.0302 | 0.7713 | 0.3569 |
| YEAR92/93 | -0.3573** | 0.1668 | 0.6996 | YEAR92/93 | -0.6034*** | 0.2245 | 0.5469 |
| Constant | -2.7136 | 0.2851 | | Constant | -2.8878 | 0.3263 | |
| -2 Log likelihood | 1734.024 | | | -2 Log likelihood | 1152.962 | | |
| df | 19 | | | df | 19 | | |
| N | 2621 | | | N | 1915 | | |
| Pseudo-R ² | 0.04 | | | Pseudo-R ² | 0.05 | | |
| Significance | * =.10; ** =.05; ***=.01 | | | | | | |

Table 8 (cont.)

Model 3:
Former FRG, Foreigners only
 (without self-employed, apprentices)
PES Jobfinders = 1

Model 4:
East Germany
 (without self-employed, apprentices)

| Variable | B | S.E. | Exp(B) | Variable | B | S.E. | Exp(B) |
|-----------------------|----------|---------|--------|-----------------------|------------|--------|--------|
| SEX | -0.0052 | 0.2733 | 0.9948 | SEX | -0.0293 | 0.2312 | 0.9712 |
| AGE45 | 1.043*** | 0.3182 | 2.8378 | AGE45 | -0.0829 | 0.2481 | 0.9205 |
| YOUTH | 0.2695 | 0.2779 | 1.3093 | YOUTH | -0.2739 | 0.4084 | 0.7604 |
| Hauptschule | 0.2168 | 0.5843 | 1.242 | Hauptschule | 0.6036 | 0.3817 | 1.8287 |
| Realschule | 0.2283 | 0.5755 | 1.2564 | Realschule | -0.1553 | 0.3538 | 0.8562 |
| Dropout | 0.4669 | 0.6247 | 1.595 | Dropout | 0.4182 | 1.2379 | 1.5192 |
| Outsider | 0.0627 | 0.2405 | 1.0647 | Outsider | -0.0564 | 0.2082 | 0.9452 |
| Arbeiter | -0.2229 | 0.3337 | 0.8002 | Arbeiter | 0.4847** | 0.2403 | 1.6237 |
| Beamte | -5.2543 | 21.1351 | 0.0052 | Beamte | -0.3003 | 1.0955 | 0.7406 |
| Agriculture | 0.9581 | 0.7693 | 2.6067 | Agriculture | 0.2359 | 0.5867 | 1.2661 |
| Industry | -0.0989 | 0.2603 | 0.9058 | Industry | -0.6371*** | 0.2412 | 0.5288 |
| PT-Marginal | -1.4566 | 1.0586 | 0.233 | PT-Marginal | 0.276 | 0.9025 | 1.3178 |
| PT-Regular | -0.3911 | 0.398 | 0.6763 | PT-Regular | 0.8178*** | 0.2654 | 2.2654 |
| SEGMENT1 | -0.4231 | 0.4141 | 0.655 | SEGMENT1 | 0.2664 | 0.2898 | 1.3052 |
| SEGMENT2 | 0.6694* | 0.401 | 1.9531 | SEGMENT2 | -0.3797 | 0.285 | 0.6841 |
| SEGMENT3 | 0.2294 | 1.2572 | 1.2578 | SEGMENT3 | -0.3127 | 1.1343 | 0.7315 |
| SEGMENT4 | -0.2913 | 0.4292 | 0.7473 | SEGMENT4 | -0.1016 | 0.389 | 0.9034 |
| SEGMENT6 | -5.3986 | 12.926 | 0.0045 | SEGMENT6 | -4.2417 | 7.3676 | 0.0144 |
| YEAR92/93 | -0.0522 | 0.267 | 0.9491 | YEAR92/93 | 0.4235** | 0.197 | 1.5273 |
| Constant | -1.9084 | 0.6518 | | Constant | -2.0389 | 0.438 | |
| -2 Log likelihood | 547.117 | | | -2 Log-likelihood | 744.271 | | |
| df | 19 | | | df | 19 | | |
| N | 706 | | | N | 920 | | |
| Pseudo-R ² | 0.07 | | | Pseudo-R ² | 0.0830042 | | |

Significance * =.10; ** =.05; ***=.01

**Table 8 (cont.): Logistic Regression,
Apprentices, All Germany**

PES Jobfinders = 1

| Variable | B | S.E. | Exp(B) |
|-----------------------|-----------|---------|--------|
| SEX | -0.2788 | 0.1997 | 0.7567 |
| Hauptschule | 0.4176 | 0.2715 | 1.5183 |
| Realschule | 0.4891** | 0.2479 | 1.6309 |
| Drop out | 0.2838 | 0.3626 | 1.3281 |
| SME | 0.0087 | 0.1851 | 1.0088 |
| YEAR | -0.0345 | 0.2099 | 0.9661 |
| Agriculture | -4.0412 | 13.5011 | 0.0176 |
| Industry | -0.1266 | 0.2065 | 0.8811 |
| FOREIGN | 0.4254* | 0.2233 | 1.5302 |
| East Germany | 0.9591*** | 0.2656 | 2.6094 |
| Constant | -1.5792 | 0.2737 | |
| -2 Log-likelihood | 782 | | |
| df | 10 | | |
| N | 742 | | |
| Pseudo-R ² | 0.03 | | |

Source: GSOEP, Waves 2- 11, own calculations.

Table 8 (cont.) Variables

| | |
|--------------|--|
| SEX: | Female |
| AGE45: | Age 45 or more |
| YOUTH: | Age <20 |
| Hauptschule: | Completed 'Hauptschule' (8-9 years of schooling) |
| Realschule | Completed 'Realschule' or equivalent (10 years of schooling) |
| Drop out: | School leaver without certificate |
| Outsider: | Previously unemployed or inactive |
| Arbeiter: | Blue collar worker |
| Beamte: | Civil servant |
| Agriculture: | Agriculture job |
| INDUSTRY: | Industry job |
| PT-Marginal: | Working time <15 hours |
| PT-Regular: | Working time 15 to 35 hours |
| SEGMENT1 | SME low skill |
| SEGMENT2 | SME skilled |
| SEGMENT3 | SME professional |
| SEGMENT4 | Large firm (>200) low skill |
| SEGMENT6 | Larger firm >200) professional |
| YEAR 92/93 | Recession 1992-93 |

5 Summary and Conclusions

The market share of PES placements in all hires averages around 16% in OECD countries, although the data should be interpreted with caution. A higher percentage of vacancies is notified to the PES by employers. The PES is most important as a search channel for individual jobseekers, especially the unemployed.

The relatively low market share of the PES is primarily a result of the fact that labour market intermediaries of any sort play only a limited role in search processes on the labour market. In every country most jobseekers find jobs and employers fill vacancies through newspaper advertisements, direct application to employers, colleagues, professional organizations, friends, and other informal channels. The possibilities for PES intervention in search processes on the labour market are thus limited in any case. Moreover, market share alone is not an appropriate PES goal. The real impact of PES activities will not be enhanced by substituting (costly) PES services for informal search processes that are equally or more efficient.

Rather than maximizing its share of placements, the PES should primarily strive to improve the efficiency of the labour market itself by promoting greater transparency (e.g. information services) and providing job search assistance, especially to the unemployed. The real impact of the PES on the outcome of labour market search processes will be greatest if it can concentrate resource intensive active measures on problem groups, without stigmatizing its clients.

A variety of factors affect PES market share and whether private competition is permitted seems not to be a major explanation. Available cross-national data show that monopoly regimes do not guarantee a high PES market share nor is there evidence for a trade-off between use of the PRES and PES in individual job search behaviour.

This is not surprising since labour market intermediaries of any sort (PES and PRES) play only a subordinate role. Expansion of the PRES need not be at the expense of the PES. Moreover, private agencies still account for a relatively small share of the placement market in almost all countries. Finally, since individuals (and employers) frequently use multiple search methods, PES and PRES are not mutually exclusive. The market share of the PES depends primarily on the quality of the services it provides and on its own market strategy rather than on the existence of private competition.

The thesis that the PRES and PES are non-competitive because PRES creams the labour market, primarily serving the employed and higher qualified jobseekers is not supported by the labour force survey data analyzed. PRES users among jobseekers (and presumably beneficiaries of PRES services) are very heterogeneous and differ only in degree from the PES clientele. This is because private employment services are themselves very diverse, and temporary work agencies, which serve a very diverse clientele, are the largest PRES component in most countries and not highly specialized management and professional recruitment agencies, which serve a very small labour market segment. The existing overlap in clienteles suggests that there is a significant potential for co-operation between public and private labour market intermediaries. Moreover, experience in some countries (e.g. the Netherlands) shows that private agencies can be successfully used to deliver placement services even to problem groups.

Our analysis of individual search outcomes on the basis of data from the German Socio-Economic Panel indicates that the PES has a relatively low market share in all placements in Germany (ca. 12% in our sample). This figure is significantly lower than reported in administrative data but consistent with the results of an employer survey conducted regularly by the German PES's own research institute. This relatively low market share is primarily a result of the fact that labour market intermediaries of any sort

play only a limited role in search processes on the labour market. In every country most jobseekers find jobs and employers fill vacancies through newspaper advertisements, direct application to employers, colleagues, professional organizations, friends, and other informal channels. The possibilities for PES intervention in search processes on the labour market are thus limited in any case.

There are, however, significant differences in PES market share among different labour market segments. For example, the PES placement rate is markedly higher for foreigners, residents of East Germany, and for young persons seeking apprenticeships. On the other hand the PES plays little or no role in transitions to civil service employment and self-employment.

Logistic regressions of individual and job characteristics associated with the likelihood of placement in employment through the PES were carried out for different labour force subgroups (West Germans, East Germans, foreigners (West), apprentices).

In West Germany being an outsider (unemployed or inactive jobseeker) and other than prime age (under 20 or 45+) significantly increased the likelihood of placement through the PES. In contrast to human capital characteristics (completed schooling), which are rarely significant, job characteristics are more important: The likelihood of placement through the PES is greater in unskilled and skilled jobs in smaller (<200) enterprises but also surprisingly in unskilled jobs in larger firms and is negatively related to marginal part time jobs (<15 hours). The role of the PES is more important in tight labour markets. These findings are, however, not consistent across all subgroups - in particular East Germany showed a distinctive pattern.

A low market share for PES placement activities in Germany is not necessarily a negative finding. The real impact PES activities will not be enhanced by substituting (costly) PES services for other search processes

that are equally or more efficient. An important question is thus whether PES placements are targeted on labour market problem groups.

A number of personal and job characteristics associated with market failure are statistically significant (youth, older workers, new and re-entrants, smaller enterprises), indicating that PES placements do to a certain extent disproportionately benefit clients in which market failure in search processes is more likely. These findings are, however, not robust, and the overall predictive power of the models is relatively low. The German PES has not only a relatively low market share in all placements, but it also substantially fails to target its activities on groups and market segments where they would have the greatest labour market impact.

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